Annual Report 2018-19

"National Knowledge Management Centre for Agriculture Education and Research"
Under the sub – component 1C (IG) of National Agricultural Higher Education Project

Lead Centre: Professor Jayashankar Telangana State Agricultural University, Hyderabad

Consortium Partner: ICAR – Indian Agricultural Research Institute, New Delhi
Tamil Nadu Veterinary and Animal Science University, Chennai
ICAR – Indian Veterinary Research Institute, Izatnagar

Executive Summary

NAHEP is designed to strengthen the national agricultural education system in India with overall objective to provide more relevant and high quality education to agricultural university students. This programme will promote efficiency and competiveness through changes in working mechanism of agricultural universities, raising the teaching and research standards through improved research and teaching infrastructure and enhanced faculty competency and commitments, and making agricultural education more attractive to talented students. There are four key components under NAHEP, namely; Institutional Development Plan (IDP), Centers for Advanced Agricultural Sciences and Technology (CAAST), ICAR to support excellence in agricultural universities (AUs), and ICAR Innovation Grants to AUs. It is envisaged that improved AU performance through quality enhancement, better employment and entrepreneurship opportunities created for agriculture graduates, non-accredited AUs attaining ICAR accreditation, and institutional reforms implemented in education division of ICAR and Aus under these components together shall contribute to the achievement of the overall program objective.

INTRODUCTION

The National Agricultural Research & Education System (NARES) is one of the largest in the world having 102 Research Institutes and 73 Agricultural Universities spread across the country. It keeps generating a large volume of research and technological innovations and thus has a repository of knowledge and information on various branches of agriculture such as crop sciences, Horticulture, Resource Management, Animal Sciences, Agricultural Engineering, Fisheries, Agricultural extension and Agricultural Education. Due to burgeoning human population, challenges of climate change and decreasing soil fertility and increasing demands of consumers have added pressure on agricultural production and value addition. Fortunately, digital information technologies and online access to information resources have strengthened the conventional library & information services.

Timely access to the relevant scholarly information on topic of interest has become crucial in the modern era. The speed and mode of services that librarians and information professionals use has thus become very important and have undergone fundamental changes over fast decades. The libraries and the librarians have to graduate to the vistas of information revolution. Indeed digital knowledge is the current buzz word. Digital resources, digital services and information access technologies continue to create new opportunities, new challenges and new expectations. Union catalogue, digital repository and digital libraries are the new dimensions that have been added under the E-Granth initiatives as apart of National Agricultural Innovation Project (NAIP) to accelerate the online access of knowledge to the researchers, teachers, students, extension professionals in 17 State Agricultural Universities and 4 deemed to be universities. These facilities have to be reached to the unreached universities of NARES. Taking note of the fast pace of innovations happening in the field of digital knowledge management, it is necessary to establish a collaborative management structure to coordinate and guide the implementation and ongoing maintenance of

the digital library; to set policy regarding participation, funding, development and access; to encourage and facilitate broad involvement; and to address issues of policy and practice that may inhibit full citizen access.

Therefore, National Knowledge Management Centre for Agricultural Education and Research (NKMC4AER) is proposed to innovate and execute newer developments for efficient use of modern platforms of digital knowledge. The NKMC4AER will continue to strengthen the digital platform for NARES repositories under various agricultural libraries of the universities**.**

Objectives:

- ✓ To act as a Digital Scholarship Centre to specialize on new technologies and tools such as data acquisition, visualization, and digital asset management, digital preservation, training and consultations as a part of the suite of services and resources.
- ✓ To Automate Agricultural University libraries using koha ILMS to facilitate sharing of digital library resources with a unified 'Online Union Catalogue'.
- ✓ To strengthen the Krishikosh platform- a digital repository for dissemination of agricultural knowledge generated under NARES to the users.
- ✓ To sensitize the stakeholders through capacity building programmes / workshops knowledge management in the networked digital environment and introduce new knowledge delivery models like MOOCs.
- ✓ To work on Altmetrics which are complementary metrics to traditional and citation- based metrics and sensitizes the stakeholders through capacity building workshops.

Work Plan:

- ✓ The **National Knowledge Management Centre for Agricultural Education and Research (NKMCAER)** will be initiated at Level 1 as the Lead Centre and the three libraries from other zones of India [Northern (IARI, New Delhi and IVRI, Izatnagar) Southern (PJTSAU, Hyderabad and TANUVAS, Chennai) as consortium (Level2). These centres will act as Digital Scholarship Centres.
- ✓ Deployment of hardware / software for a centralized platform for digital repository including servers, network, storage and backup equipment and services.
- ✓ During the first stage the complete automation of library will be initiated for Lead and consortium centre libraries.
- ✓ The Krishikosh platform- a digital repository for dissemination of agricultural knowledge generated under NARES will be strengthened to ensure effective and efficient resource sharing.
- ✓ The stakeholders will be sensitized on knowledge management in the networked digital environment and new knowledge delivery models like MOOCs through capacity building programmes / workshops.
- ✓ Altmetrics which are complementary metrics to traditional and citation- based metrics are gaining significance. Hence, the stakeholders shall be sensitized on this topic through capacity building workshops.

The Organizational Structure of **NKMC4AER** consists of all the 73 libraries under NARES (Agricultural Universities (62), Deemed to be Universities (5), Central Agricultural University (2) and Central Universities (4). The entire project will be executed in coordination with all the four consortium partners to achieve the desired goals.

Expected Output:

- ✓ Upscaling the four centres into the State – of – the – Art Digital Scholarship Centres.
- ✓ Automation and integration of agricultural libraries with koha Integrated library Management System across the NARES.
- ✓ Development of user-friendly digital repository platform to submit, manage and access institutional repository including theses produced by NARES researches, faculty and research scholars in compliance with open access policy of ICAR.
- ✓ At Krishikosh, researcher can have a unified access to content on all media types thereby making information retrieval much easier and faster.
- ✓ Application of bibliometric and scientometric analysis for technology forecasting. This will help in strategic planning of Science and Technology in Agriculture.
- ✓ Tools for dissemination of information through mobile app as push notification.
- ✓ Advanced AgriCat with more bibliographical records to serve the purpose of a national level Online Union Catalogue accessible 24x7x365 basis which will provide semantic search and retrieval facilities to share library resources across the country.

Objective wise detailed progress

NKMCAER website (http://14.139.56.94/nkmc4aer/) has been developed using Wordpress approach which based on content management system, or CMS. WordPress is a free and open-source content management system based on PHP & MySQL. Features include a plugin architecture and a template system. The website of this sub- project hosted at datacentre of IARI, New Delhi. Batch uploading tools has been developed. More than 50, 000 items which includes 40,000 thesis from various SAUs/ Institute are uploaded in Krishikosh Repository during 1 April, 2018 to 31 March, 2019. Training programe on "Strengthening of Digital Library in NARES using KOHA Platform" for Northern India was organized at PAU, Ludhiana during 18-19 March, 2019 (ICAR-IARI, New Delhi). Training cum Sensitization Workshop on "Krishikosh Repository for Strengthening Agricultural Knowledge in NARES" on 18th December, 2018 at GovindBallabh Pant University of Agriculture and Technology, Udham Singh Nagar, Pantnagar, Uttarakhand. More than 150 Students and faculties participated. During the period upon report (during 1st April, 2018- 31 January, 2019), Google analytics showed that more than 89,20,784 hits are on Krishikosh website. Highest number of users of Krishikosh falls in the age group of 25-34, the lowest is 65+. It can also be concluded that highest number of users might be students and researchers all over the world.

Objective 1

NKMC4AER – Website(http://14.139.56.94/nkmc4aer/)

NKMC4AER website has been developed using Wordpress approach which based on content management system, or CMS. WordPress is a free and open-source content management system based on PHP & MySQL. Features include a plugin architecture and a template system. As a web application various technologies come together to form a web application which includes:

- The Database Layer is a MySQL database.
- The Application Layer - which some would consider WordPress itself - is written in PHP and handles a lot of the core operations for reading and writing to the data store all the while providing APIs for developers to take further advantage of it.
- The Presentation Layer uses basic CSS (at least for now), HTML (with some themes now using HTML5), jQuery, and with parts of the dashboard using Backbone.js.

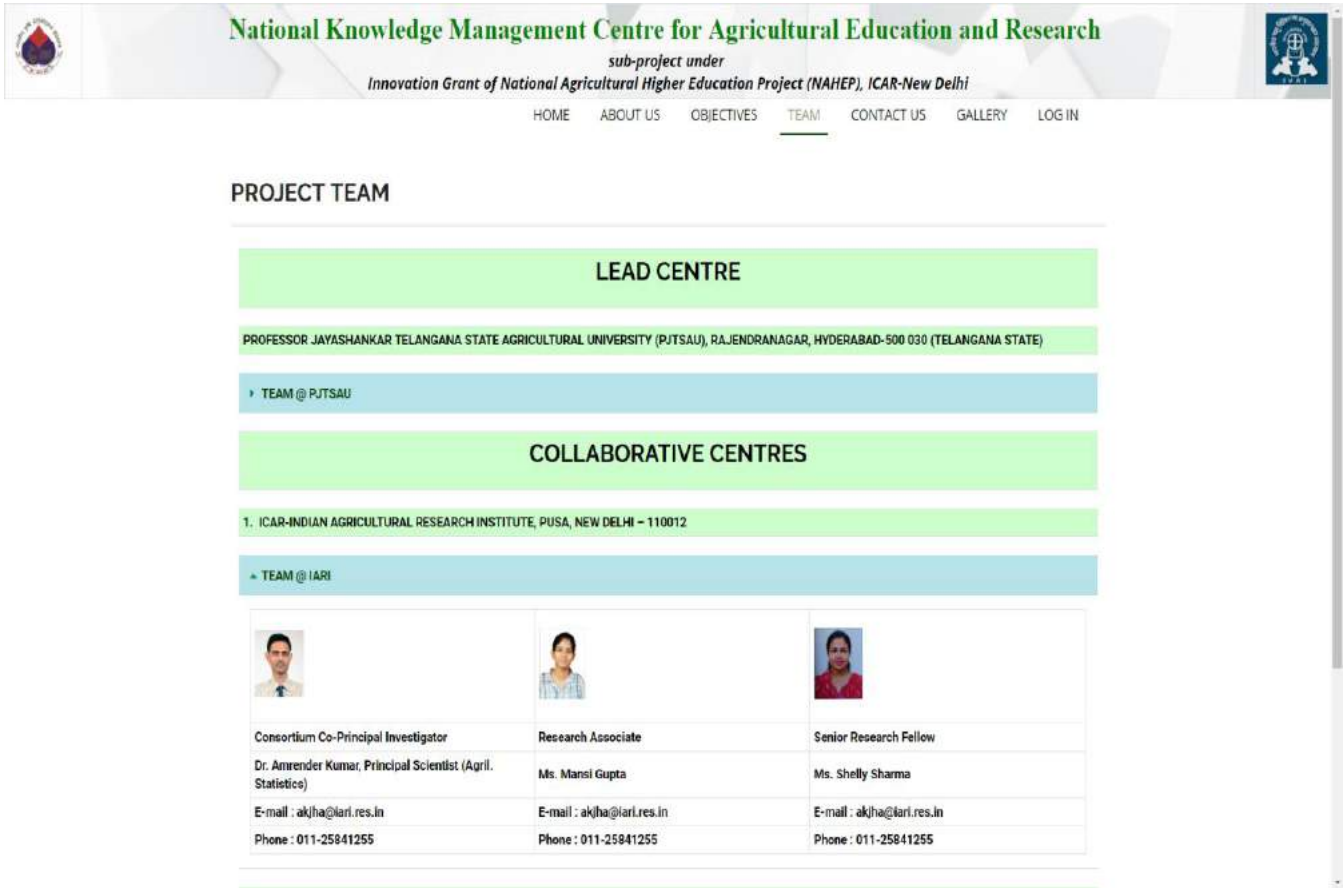
Home Page of the NKMC4AER (http://14.139.56.94/nkmc4aer/) site

About Us

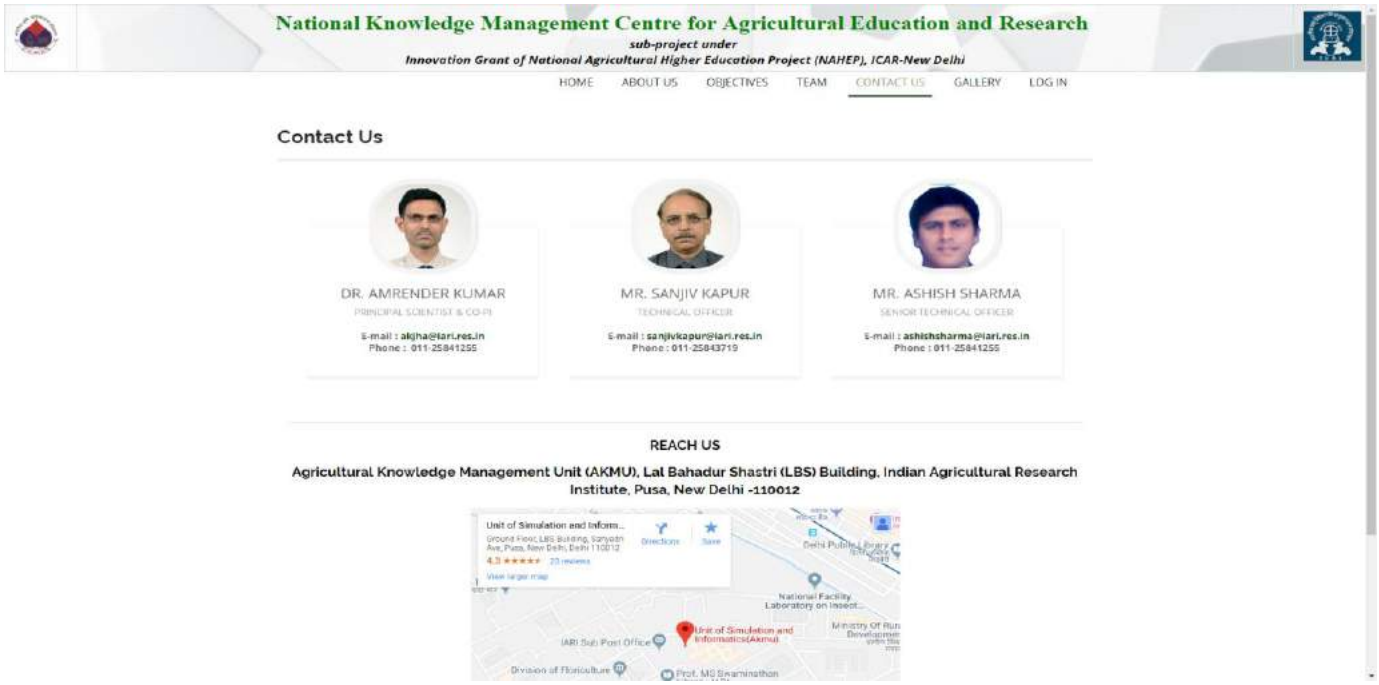
Objectives

Team


National Knowledge Management Centre for Agricultural Education and Research
sub-project under
Innovation Grant of National Agricultural Higher Education Project (NAHEP), ICAR-New Delhi
HOME ABOUT US OBJECTIVES TEAM CONTACT US GALLERY LOG IN
PROJECT TEAM
LEAD CENTRE
PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY (PJTSAU), RAJENDRANAGAR, HYDERABAD-500 030 (TELANGANA STATE)
TEAM @ PJTSAU
COLLABORATIVE CENTRES
1. ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE, PUSA, NEW DELHI – 110012
TEAM @ IARI
2. TAMIL NADU VETERINARY AND ANIMALI SCIENCES UNIVERSITY, MADHAVARAM MILK COLONY, CHENNAI, TAMIL NADU- 600051
TEAM @ TANUVAS
3. ICAR- INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR, BAREILLY, UTTAR PRADESH – 243122
TEAM @ IVRI
Site Designed and Developed by Agricultural Knowledge Management Unit, Indian Agricultural Research Institute, New Delhi-110012


National Knowledge Management Centre for Agricultural Education and Research
sub-project under
Innovation Grant of National Agricultural Higher Education Project (NAHEP), ICAR-New Delhi
HOME ABOUT US OBJECTIVES TEAM CONTACT US GALLERY LOG IN
PROJECT TEAM
LEAD CENTRE
PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY (PJTSAU), RAJENDRANAGAR, HYDERABAD-500 030 (TELANGANA STATE)
TEAM @ PJTSAU
COLLABORATIVE CENTRES
1. ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE, PUSA, NEW DELHI – 110012
TEAM @ IARI
Consortium Co-Principal Investigator
Dr. Amrender Kumar, Principal Scientist (Agril. Statistics)
E-mail : akjha@iari.res.in
Phone : 011-25841255
Research Associate
Ms. Mansi Gupta
E-mail : akjha@iari.res.in
Phone : 011-25841255
Senior Research Fellow
Ms. Shelly Sharma
E-mail : akjha@iari.res.in
Phone : 011-25841255

Contact Us


National Knowledge Management Centre for Agricultural Education and Research
sub-project under
Innovation Grant of National Agricultural Higher Education Project (NAHEP), ICAR-New Delhi
HOME ABOUT US OBJECTIVES TEAM CONTACT US GALLERY LOG IN
Contact Us
DR. AMRENDER KUMAR
PRINCIPAL SCIENTIST & CO-PI
E-mail : akjha@iari.res.in
Phone : 011-25841255
MR. SANJIV KAPUR
TECHNICAL OFFICER
E-mail : sanjivkapur@iari.res.in
Phone : 011-25843719
MR. ASHISH SHARMA
SENIOR TECHNICAL OFFICER
E-mail : ashishsharma@iari.res.in
Phone : 011-25841255
REACH US
Agricultural Knowledge Management Unit (AKMU), Lal Bahadur Shastri (LBS) Building, Indian Agricultural Research Institute, Pusa, New Delhi -110012
Unit of Simulation and Inform...
Directions
Save
View larger map
National Facility Laboratory on Insect...
Ministry Of Rural Development
IARI Sub Post Office
Unit of Simulation and Informatics(Akmu)
Division of Floriculture
Prof. MS Swaminathan

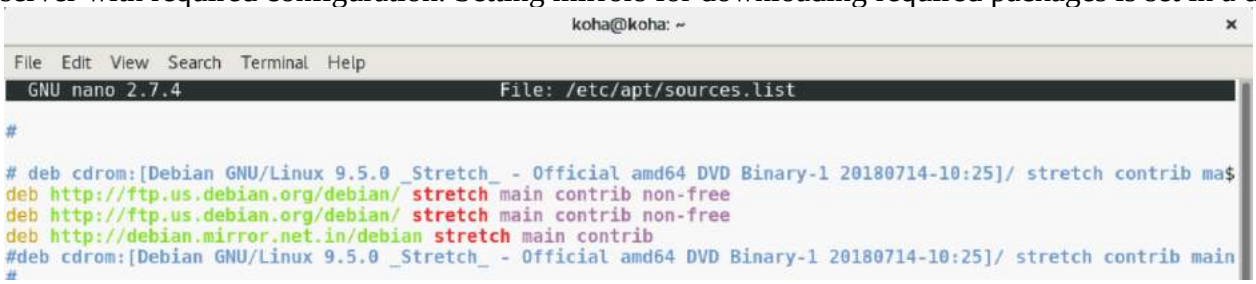
Gallery


National Knowledge Management Centre for Agricultural Education and Research
sub-project under
Innovation Grant of National Agricultural Higher Education Project (NAHEP), ICAR-New Delhi
HOME ABOUT US OBJECTIVES TEAM CONTACT US GALLERY LOG IN
Image Gallery
Project Gallery
Training-Cum-Workshop at Govind Ballabh Pant University of Agriculture and Technology, Pantnagar on 18 Dec. 2018
30TH OCTOBER, 2018
UNIVERSITY LIBRARY
Site Designed and Developed by Agricultural Knowledge Management Unit, Indian Agricultural Research Institute, New Delhi-110012

Objective 2

KOHA Installation and Instance Creation on Test Server

The installation and functionality of Koha is found more stable on a debian linux based platform. The Debian packages are the preferred, and easiest, way to install Koha. So, the debian is chosen over wide range of available Operating Systems. Debian current version 9.x (Stretch) was successfully installed on any server with required configuration. Setting mirrors for downloading required packages is set in a debian file.



This is followed by setting path of for current stable version of Koha.

Adding the key in gpg.asc to APT trusted keys to avoid warning messages on installation. Through "**apt-get update**"repository is updated to reflect the changes made in the system

```
root@koha:~# wget -O- http://debian.koha-community.org/koha/gpg.asc | sudo apt-key add -
--2018-09-07 00:33:02-- http://debian.koha-community.org/koha/gpg.asc
Connecting to 172.16.0.6:80...connected.
Proxy request sent, awaiting response... 200% OK
Length: 50552 (49K) [text/plain]
Saving to: 'STDOUT'

100%[==============>] 50,442          38.4K/s    in 1.3s

--2018-09-07 00:33:06 (38.4 KB/s) - written to stdout [50442/50442]

OK
root@koha:~#
```

Through "**apt-get update**"repository is updated to reflect the changes made in the system. Koha installation is then started, by running the simple "install koha-common" command. Koha installation is a little long process, after completion of which server configuration is done.

In server configuration ports are set in Koha configuration files for OPAC and Koha-client. Apache2 ports file also updated to listen the mentioned ports.

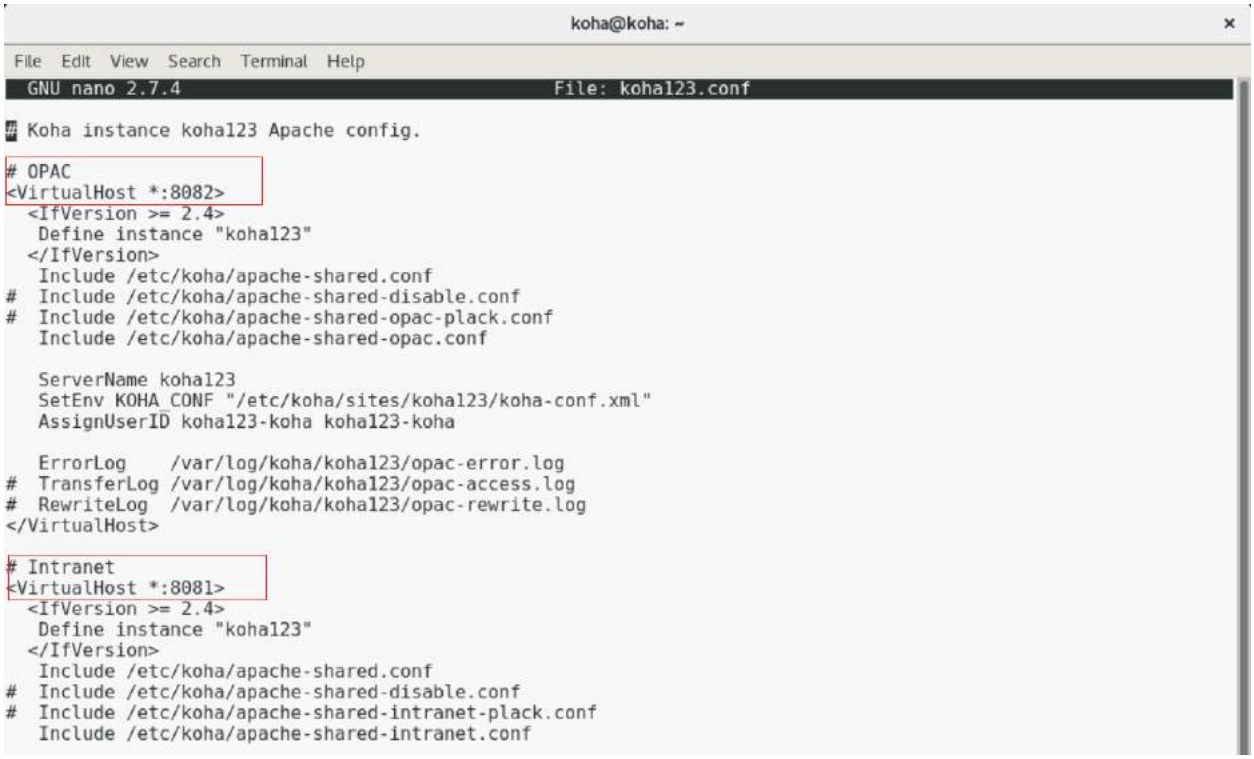
Apache is then restarted to save and reflect the changes so made and modules & sites are enabled by following commands:

sudo a2dissite 000-default
sudo a2enmod deflate
sudo a2ensite library

In Koha ,mySQL is used as a database, the mysql can be installed after this , if not available earlier. Koha instance is then created, that creates a database in the mysql database with same name as that of the instance eg. If the instance created is ‘library1’ then database is created by the name ‘koha_library1’. After that if this is the fresh installation then the web-installer steps are followed through browser.

Multiple Instances

Multiple instances can also be created in Koha to maintain different libraries. Multiple instances mean different libraries with entirely different collections, policies, preferences, etc. This results in completely independent instances, where each instance has its own database, with bibliographic records, patrons, setting etc completely independent from all the other instances. For this, new ports for OPAC and staff client, are added in the apache2 server ports file. After that, through “koha-create --create-db” command new instance library is created. That creates a database with the same name as that of the instance. After creating the instance, ports are added in the instance configuration file under OPAC and Staff Client.



Koha instance list can be checked using 'koha-list' command, with each instance a configuration file is created where ports can be changed for new instance OPAC & Staff client.

For fresh installation web-installer is followed to build the library instance OPAC & Staff-client, with the localhost followed by respective port number for staff client, mentioned in the instance configuration file.If the databackup is already available for a new instance that can directly be restored in the instance created, then it is restored in the database of created instance. "koha-upgrade-schema" command is run to upgrade the schema to current version. After upgradation of the database schema, zebra command is run to reflect the current indexes.

Objective 3

Digital initiatives:

Indian National Agricultural Research and Education System (NARES) is a huge repository of knowledge and information on crop sciences, horticulture, resource management, animal sciences, agricultural engineering, fisheries, agricultural extension and agricultural education. Digital technologies and online access to information resources have brought increased expectation from library and information services. For researchers, fast access to existing scientific outputs and archived scholarly information on their topic of interest is as crucial as current scientific knowledge. The modes of services that librarians and information professionals provide has thus become very important and have undergone fundament changes over past few decades. Digital resources, digital services and access technologies continue to create new opportunities, new challenges and new expectations. Union catalogue, digital repository and digital libraries are the new paradigms which have been taken up under E-Granth initiative to facilitate researchers, teachers, students, extension professionals. The National Knowledge Commission also has recommended an Open Access mandate for publicly funded research. It has been observed that in the recent years subscription to journals by libraries of ICAR Institutes/SAUs has been on the decline mainly because of the increase in the cost of reputed relevant journals and books coupled with reducing fund availability for the purpose. At the same time, the research/educational activities must always keep pace with the international competition for

which all important journals and books should be made available to researchers / teachers in the NARES. Maintaining a traditional form of library with hardcopies is becoming labour-intensive and adds to the cost. Each and every library cannot be sustained without adequate funds. NARES must take advantages of sweeping changes taking place globally. Considering these fact the importance of digital library under E-Granth becomes more relevant. The institutional repository can hold all the intellectual outputs of the NARS system in the form of digitized institutional publications, technical reports, annual reports, lectures, authors collection in the form of preprints, reprints etc. These contents to which one can easily have open access, essentially captures all the intellectual work being done under NARES. The same intellectual output when gets published in the form of research papers in the commercial journals become inaccessible due to high cost. Thus institutional repository provides alternative source of scientific information to support our quality research and teaching.

KrishiKosh (Digital Repository): KrishiKosh is a digital repository which captures, preserves, archives and provide policy based access to the intellectual output of Indian NARES. It is a unique repository of knowledge in agriculture and allied sciences, having collection of old and valuable books, institutional publications, technical bulletins, project reports, lectures, preprints, reprints, thesis, records and various documents spread all over the country in different libraries of Research Institutions and State Agricultural Universities (SAUs). The KrishiKosh acts as digital platform to preserve institution's intellectual assets and help in providing and managing open access to institution's intellectual assets. Open access to intellectual output is gaining momentum because the researchers and authors give away their hard intellectual work in the form of research papers, technical bulletins, books etc. to commercial publishers in search of impact of their work and not the commercial income from it. Their interest is to widely disseminate the research output but publishers restrict the circulation often by putting high subscriptions to fulfil their commercial interests, thus, creating an impact barrier. On the other hand, researchers and scientific workers look for easy access to scientific and other literature but most of the time, most of us do not have easy access to most of literature created by our own community for lack of money required to be paid to publishers, creating an access barrier. These structural problems with scholarly publishing can be addressed to some extent by KrishiKosh a digital repository with Open Access mandate.

The KrishiKosh digital repository can be seen as complementary to the commercial publishing, it can help and advice on IPR issues as output are available in digital form for easy search, can help and advice on research programme formulation and efficient management of institutional information assets. The need for improving accessibility coupled with need for preservation was initiative under E-Granth. To create dependable digital storage and an efficient Integrated Content Management System (ICMS), an open source software DSpace has been customized to meet the requirements. It provides following functionalities to KrishiKosh:

- Improve Accessibility:- The KrishiKosh makes the holdings more accessible to scholars, teachers, academics and the general public, both within the premises as well as to those who cannot personally visit the NARS libraries but want to access the contents through the internet, under open access policy.
- Enhanced Search ability:- All holdings are grouped in communities and collections based on institutions, subjects, themes or other criteria making large amount of information easily available on any subject matter for teaching, research and development. Any researcher looking for content on any subject or themes can have a unified access to content on all media types (manuscripts, photographs, audio-video, etc.) thereby making the searching much easier and faster.
- Preservation:- Preservation of all the rare documents in electronic form is important objective. Also, once the documents are scanned and digitized, preservation of the originals can be ensured for a much longer period as the need to handle the physical documents is eliminated or minimized to a great extant since document are made available through the digital repository.

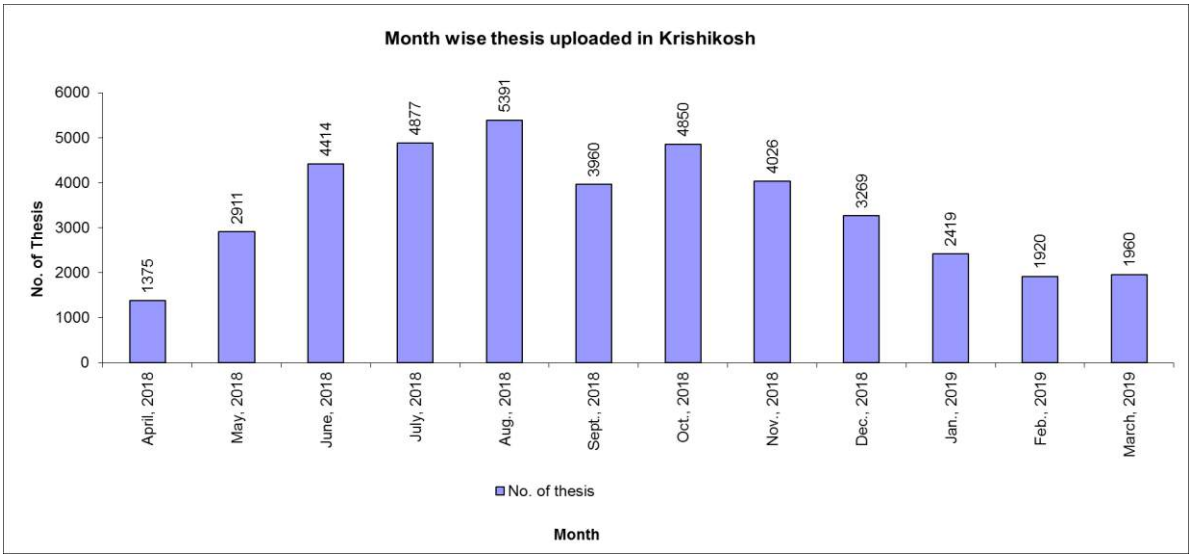
The Krishikosh digital repository which provides digital platform for publishing can help and advice on IPR issues, research programme formulation and efficient management of institutional information assets. A customized digital repository platform for users of NARES Institutions, where they can upload and manage their own contents for compliance to open access policy of ICAR. At present Krishikosh digital repository has 35 million digitized pages in **one lakh sixty thousand digital items** (volumes) like old books, old Journals, reports, proceedings, reprint, research highlights, training manuals, historical records, including more than one lakhs **theses digitized** from various NARES Institutes / SAUs. Krishikosh is a user-friendly

platform to deposit, manage and access for Institutional information viz. books, reports, reprints, proceeding, thesis and Institutional publications produced by NARES researchers. The Institute/Agricultural Universities wise thesis /documents available (till 31 March., 2019) and month wise (April, 2018 to March, 2019) thesis submitted in Krishikosh are given below:

S. No.	Institute Name	Thesis	others documents
1.	Acharya N G Ranga Agricultural University, Guntur	638	2
2.	Agriculture University, Kota	5	1
3.	Anand Agricultural University, Anand	4552	484
4.	Assam Agricultural University, Jorhat	215	0
5.	Bidhan Chandra Krishi Viswavidyalaya, WB	279	0
6.	Bihar Agricultural University, Sabore	96	173
7.	Bihar Animal Sciences University, Patna	510	1
8.	Birsa Agricultural University, Ranchi	668	0
9.	Central Agricultural University, Pasighat	61	13
10.	Central Institute of Fisheries Education, Mumbai	857	67
11.	ChaudharyCharan Singh Haryana Agricultural University,Hisar	8193	334
12.	ChaudharySarwan Kumar Himachal Pradesh Agriculture University, Palampur	2330	4
13.	Chhattisgarh KamdhenuVishwavidyalaya, Durg	125	0
14.	CSA University of Agriculture and Technology, kanpur	186	0
15.	Dr. BalasahebSawant Konkan KrishiVidyapeeth, Dapoli	677	7
16.	Dr. PanjabraoDeshmukhKrishiVidyapeeth, Akola	722	1
17.	Dr. RajendraPrasad Central AgriculturalUniversity, Pusa	327	0
18.	Dr. Y. S. Parmar University of Horticulture & Forestry, Solan	3990	0
19.	Dr.Y.S.R. Horticultural University, Venkataramannagudem	389	0
20.	GovindBallabh Pant University of Agriculture & Technology, Pantnagar	2603	0
21.	Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana	1161	13
22.	Indian Agricultural Research Institute, New Delhi	5024	6082
23.	Indian Veterinary Research Institute, Izatnagar	1509	2363
24.	Indira Gandhi KrishiVishwavidyalaya, Raipur	3532	402
25.	Institute of Agricultural Sciences, Banaras Hindu University, Varanasi	704	3
26.	Jawaharlal Nehru KrishiVishwaVidyalaya, Jabalpur	5195	9
27.	Junagadh Agricultural University, Junagadh	1969	80

28.	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar	426	22
29.	Kamdhenu University, Gandhinagar	11	0
30.	Kerala Agricultural University, Thrissur	1803	1257
31.	Kerala University of Fisheries and Ocean studies, Ernakulum	5	0
32.	Kerala Veterinary and Animal Sciences University, Wayanad	82	0
33.	LalaLajpat Rai University of Veterinary & Animal Sciences, Hisar	594	0
34.	MaharanaPratap University of Agriculture and Technology, Udaipur	1623	7
35.	Maharashtra Animal and Fishery Sciences University, Nagpur	3112	2
36.	Mahatma PhuleKrishiVidyapeeth, Rahuri	6568	34
37.	Nanaji Deshmukh Veterinary Science University, Jabalpur	924	1
38.	Narendra Deva University of Agriculture & Technology, Faizabad	118	0
39.	National Dairy Research Institute, Karnal	2800	1221
40.	Navsari Agricultural University, Navsari	2546	405
41.	Orissa University of Agriculture and Technology, Bhubneswar	5241	37
42.	PanditDeenDayalUpadhyayaPashuChikitsaVigyanVishwavidyalayaEvam Go-AnusandhanSansthan, Mathura	1014	0
43.	Professor Jayashankar Telangana State Agricultural University, Hyderabad	8394	3316
44.	Punjab Agricultural University, Ludhiana	2490	7
45.	PVNR Telangana Veterinary University, Hyderabad	205	0
46.	Rajasthan University of Veterinary and Animal Sciences, Bikaner	394	0
47.	RajmataVijyarajeScindiaKrishiVishwaVidyalaya, Gwalior	1565	134
48.	Sam Higginbottom Institute of Agriculture, Technology and Sciences	340	1
49.	SardarVallabhbhai Patel University of Agriculture & Technology, Meerut	93	23
50.	Sher-e-Kashmir University of Agricultural Sciences and Technology-Jammu	362	0
51.	Sher-e-Kashmir University of Agricultural Sciences and Technology, Kashmir	508	0
52.	Sri Karan Narendra Agriculture University, Jobner	598	581
53.	Sri Venkateswara Veterinary University, Tirupati	1753	17
54.	Swami Keshwanand Rajasthan Agricultural University, Bikaner	685	0
55.	Tamil Nadu Agricultural University, Coimbatore	1096	434
56.	Tamil Nadu Fisheries University, Thoothukudi	158	34

57.	Tamil Nadu Veterinary and Animal Sciences University, Chennai	2795	15446
58.	University of Agricultural & Horticultural Sciences, Shivamogga	3	6
59.	University of Agricultural Sciences, Bengaluru	6062	6692
60.	University of Agricultural Sciences, Dharwad	2433	1
61.	University of Agricultural Sciences,Raichur	74	0
62.	University of Horticultural Sciences, Bagalkot	458	29
63.	Uttarakhand University of Horticulture and Forestry, Bharsar	85	0
64.	Uttar Banga Krishi Viswavidyalaya, Cooch Behar, WB	394	19
65.	VasantraoNaikMarathwada Agricultural University, Parbhani	6876	47
66.	West Bengal University of Animal & Fishery Sciences, Kolkata	1197	9
	Other ICAR Institute	0	10500
	Sub – Total	**107850**	**50321**



Google analytics of Krishikosh

Google analytics of Krishikosh during 1st April, 2018- 31st March, 2019 indicates that 11,266,929hits are on Krishikosh website (fig. 1). India, United States, Sudan, Ethiopia, Russia, China are the top six countries who visited this digital platform. Figure 2, represents demographics in terms of age of the users of Krishikosh. Highest number of users of Krishikosh falls in the age group of 25-34, the lowest is 65+. It can also be concluded that highest number of users might be students and researchers all over the world. The user visits Krishikosh through various devices such as mobiles, laptops, desktops etc. Figure 3.shows the number of users visiting Krishikosh through these devices. It is represented that during the time span, desktop users are more than mobile and laptop users, but with growing popularity of mobile application of Krishikosh, mobile users will increase rapidly. Krishikosh repository was viewed by 175 countries. Through Google analytics it's shown that Krishikosh is visited through various browsers which also show

that this portal is independent of the browsers platform. It can be viewed via any web portal system in the world.

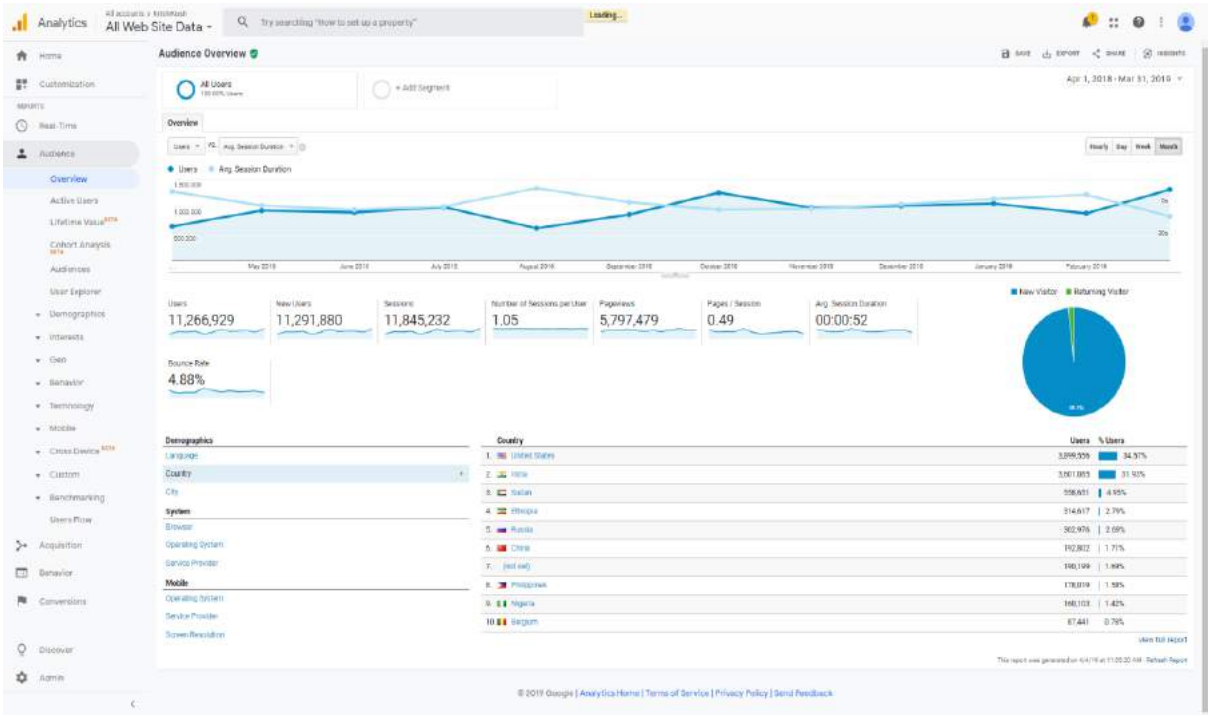


Figure 1.

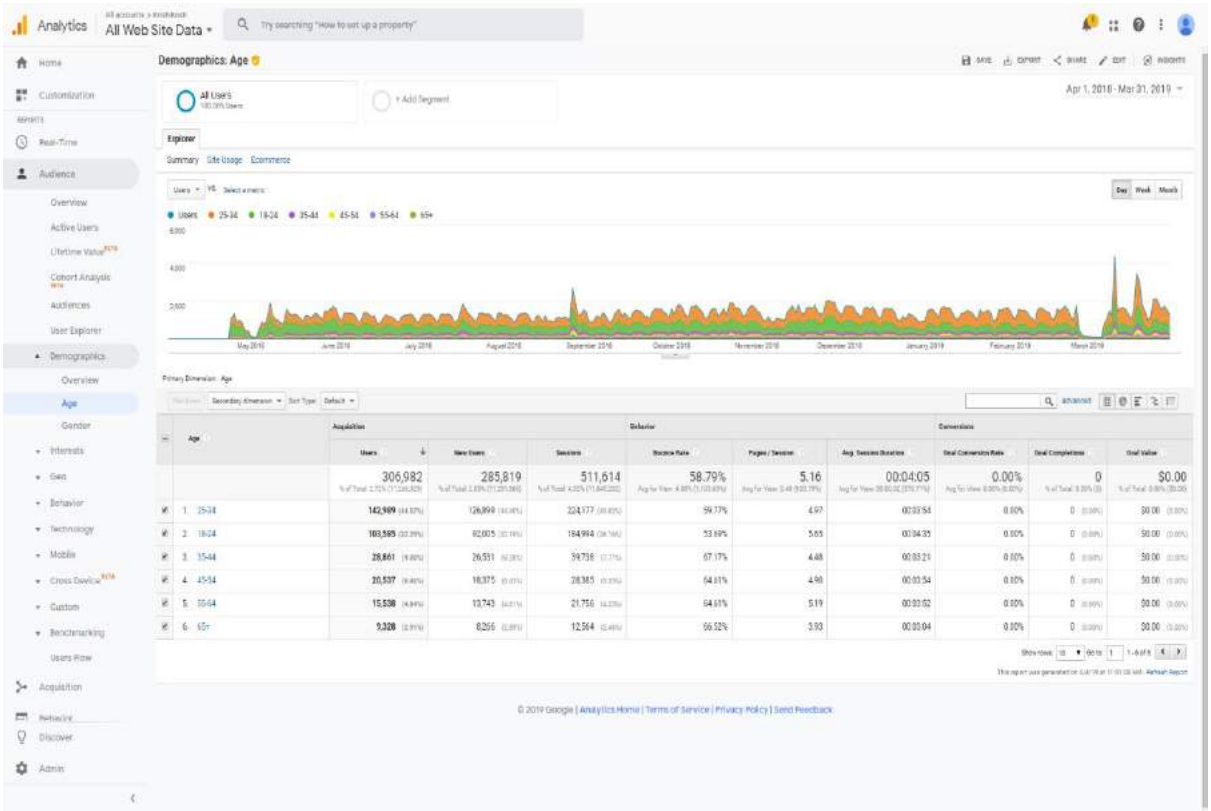


Figure 2.

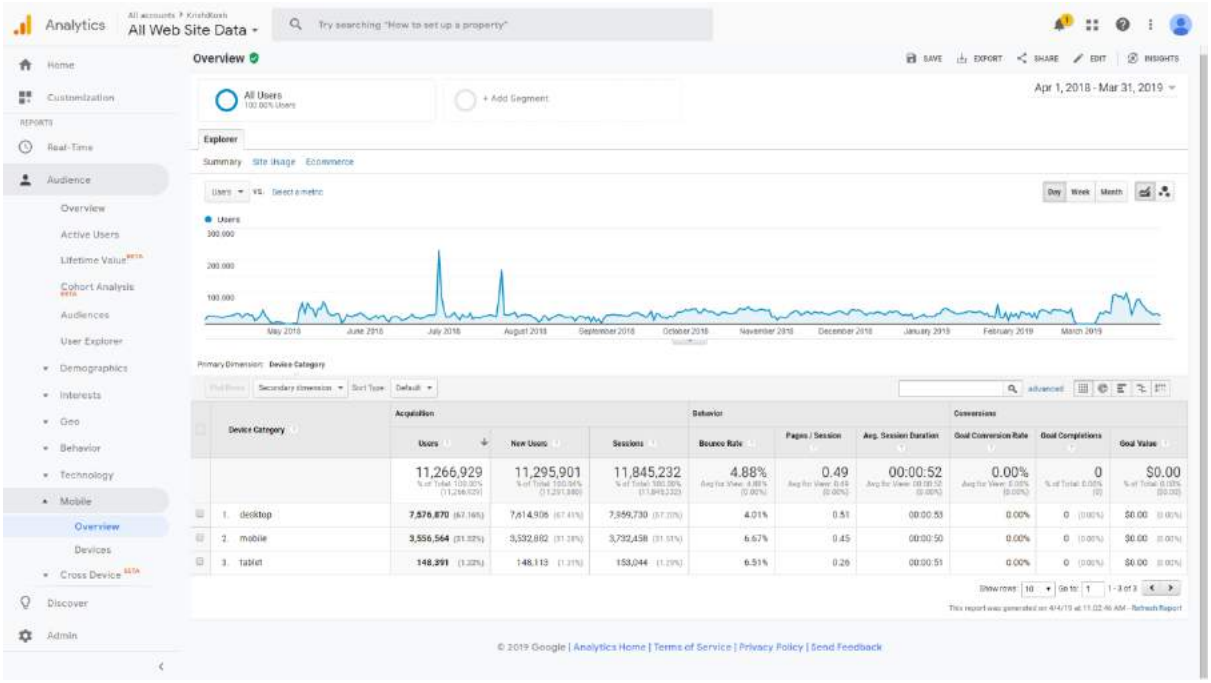
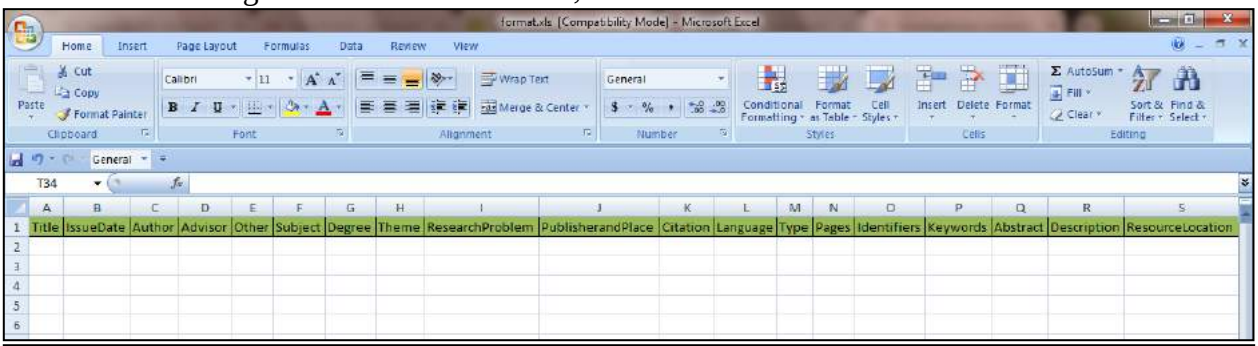


Figure 3.

Tools for Bulk Upload in Krishikosh

In Krishikosh, resource can be uploaded one by one by the user or the data can be imported in bulk. For bulk-import in Krishikosh a toll is developed to convert the raw data in the Krishikosh format data and then through command line this processed data is imported into Krishikosh. Raw data needed for the tool is the excel sheet, in a pre-described format of the metadata of the content and their respective pdf files. The complete procedure of bulk-uploading is described below:

Prepare a excel sheet as given in the format below, with metadata.



Title	IssueDate	Author	Advisor	Other	Subject	Degree	Theme
Effect of sodium propionate on shelf life of Khoa	1994	Shinde, Anant Tatesaheb	Lembhe, A. F.		Dairy Technology	M.Sc	Agriculture
Studies on physicochemical and biochemical properties of Dahi, a fermented product from cow milk	1983	Aswalekar, Gangadhar Ravanbapu	Ingle, U. M.		Dairy Technology	M.Sc	Agriculture
Studies on the effect of soluyeast (yeast culture) on the performance of broilers	1995	Pande, Krishna Banderao	Deshmukh, S. V.		Animal Nutrition	M.Sc	Agriculture
Effect of NAA on growth, development and yield in arhar (Cajanus Cajan L.)	1995	Surve, Sanjaykumar Baburao	Sathe, B. V.		Agricultural Botany	M.Sc	Agriculture

ResearchProblem	PublisherandPlace	Citation	Language	Type	Pages	Identifiers	Keywords	Abstract	Description
	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani		English	Thesis	69p.	TH2438	Sodium; Propionate; Khoa; Phenomenon; Perishable		
	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani		English	Thesis	50p.	TH0766	Biochemical; Fermented; Physicochemical; Cowmilk; Product		
	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani		English	Thesis	54p.	TH2681	Soluyeast; Broilers; Antibiotics; Pharmaceuticals		
	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani		English	Thesis	62p.	TH2710	Arhar; Cajanus cajan L.; Agronomical		

ResourceLocation
D:/VNMKV-500-2nd/TH2438.pdf
D:/VNMKV-500-2nd/TH0766.pdf
D:/VNMKV-500-2nd/TH2681.pdf
D:/VNMKV-500-2nd/TH2710.pdf

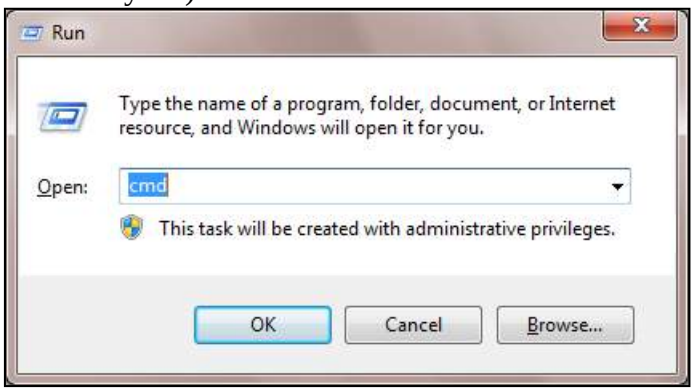
Once the data or bibliographic information is received please check the information format to be in the following format, for some specific fields:

IssueDate	Year of Issue of theses, enter only year & make sure it is in 'text' format in the cell as else it will on processing displayed as following: <dcvalue element="**date**" qualifier="**issued**">**2011.0**</dcvalue>
Subject	Relevant subject of theses, make sure all subjects spelling & format

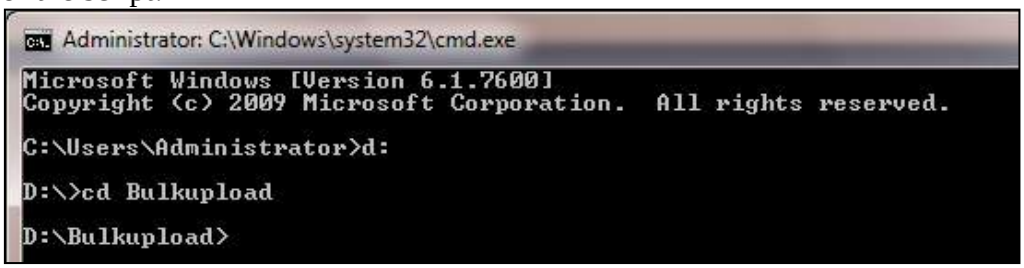
	should be same to maintain the uniformity
Degree	Degree of theses, make sure to maintain the uniformity as Phd& M. Sc. & not entering various format like , Msc, MSc., Phd. , M.Scetc
Pages	No. of pages in the document. No. of pages to be entered in the format as 50p. & not as 50 pages or 50 to maintain the uniformity.

Once the excel sheet is ready with all the all the files available at the location mentioned in the excel sheet 'ResourceLocation' field , now the bulk upload script can be run to convert the available information into Dspace Bulk import format.

Open the command line (window key + r):

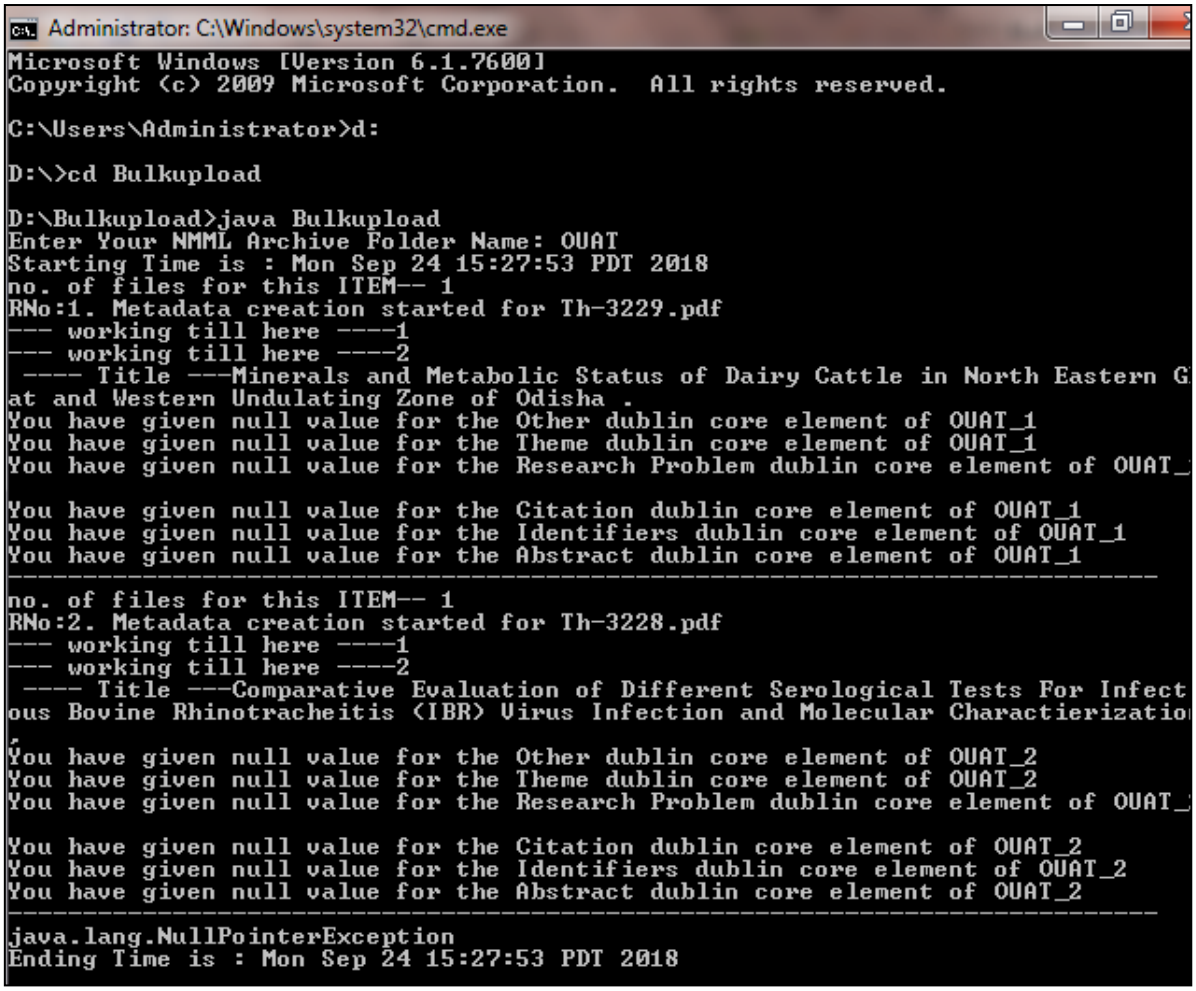


Enter the path of the script:

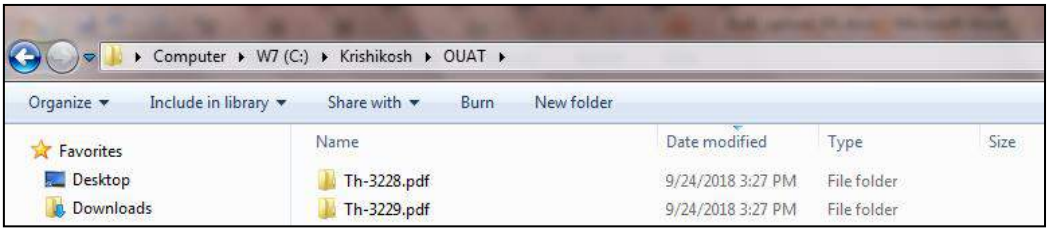


Now type the command & press enter, it will ask for a folder name to be created for saving the bulkimport format files. (Note: Do create a folder in C:\ with the name 'Krishikosh', as in script it will create the new folder in this path)

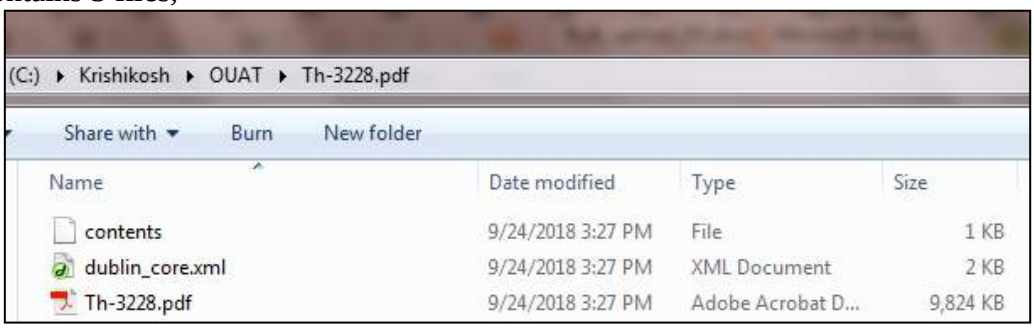
Press enter, & script will start running through excel sheet, processing wach row of it and then converting it into krishikosh format:



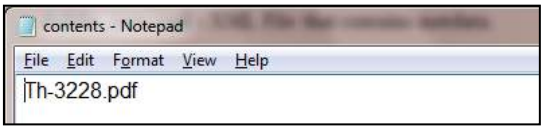
By running this command , each row in excel is converted into the folder. Eg. If a excel sheet contains 500 Records, 500 flders will be created



Each folder contains 3 files,



Contents : Contains the name of the file .



dublin_core.xml : XML File that contains bibliographic/metdata:

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<!-- title of pdf Th-3228.pdf.pdf -->
- <dublin_core>
  <dcvalue element="title" qualifier="none">Biological Control of Major Insect Pests in Cabbage.</dcvalue>
  <dcvalue element="date" qualifier="issued">2004</dcvalue>
  <dcvalue element="contributor" qualifier="author">Das, Tapan Kumar</dcvalue>
  <dcvalue element="contributor" qualifier="advisor">Mandal, S.M.S</dcvalue>
  <dcvalue element="sub" qualifier="none">Entomology</dcvalue>
  <dcvalue element="these" qualifier="type">M.Sc</dcvalue>
  <dcvalue element="publisher" qualifier="none">Orissa Univesrity of Agriculture and Technology; Bhubaneswar</dcvalue>
  <dcvalue element="language" qualifier="iso">English</dcvalue>
  <dcvalue element="type" qualifier="none">Thesis</dcvalue>
  <dcvalue element="pages" qualifier="none">67p.</dcvalue>
  <dcvalue element="keywords" qualifier="none">Biological , Control , Major, Insect , Pests , Cabbage.</dcvalue>
  <dcvalue element="description" qualifier="abstract">Name of the student Admission number Title of the thesis Degree for which
    submitted Name of the department Year of submission Name of the advisor Tapan Kumar Das 76Ent./2002 BIOLOGICAL
    CONTROL OF MAJOR INSECT PESTS IN CABBAGE M.Sc. (Ag.) Entomology Department of Entomology College of Agriculture
    OUAT, Bhubaneswar 2004 Mr. S.M.A. Mandal Assistant Professor ABSTRACT A field experiment was conducted at the Central
    Research Station, Orissa University of Agriculture and Technology, Bhubaneswar during Rabi, 2003-2004 to study the bioefficacy
    of six treatments comprising three microbial pesticides (SINPV, B.t.k. and B. bassiana), one botanical pesticide (azadirachtin) and
    one predator (c. carneal against untreated check to suppress the major insect pests attacking cabbage. Among the insect pests
    that attacked cabbage crop at Bhubaneswar, three species of lepidopteran pests, viz., S. litura, C. binotalis and P. xylostella and
    three species of aphids, viz., L. erysimi, M. persicae and B. brassicae were found as major. Among the predators four species of
    ladybird beetles, viz., Coccinella repanda, C. septempunctata, Cheiiomenes sexmaculata and Micraspis discolor and two species of
    syrphid flies, VIZ., Ischiodon scutellaris and Eumerus albifrons were ~ant. Spraying of azadirachtin 0.03EC (2.5 Ljha)j B.t.k. (0.5
    kg/hall B. bassiana (1.5 kg/hal at 30 and 60 days after transplanting (DAT) & release of C. carnea @ 50, 000 eggs/ha at 40 and
    70 DAT suppressed the popUlation of major pests upto a satisfactory level without affecting the natural predator population.
    These three treatments reduced the larval popUlation of S. litura, C. binotalis and P. xylostella to the tune of 76.39 to 78.96 per
    cent, 77.33 to 86.6~ per cent and 76.89 to 84.41 per cent, respectively while aphid population to the extent of 61.99 to 90.76 per
    cent. Reduction in coccinellids (grubs and adults) and syrphids (maggots) varied from 10.82 to 14.80 per cent and 10.62 to 16.00
    per cent only. These three treatments produced the re~ in leave damage to the extent of 78.16 to 83.45 per cent and head
    damage to the extent of 76.07 to 79.91 per cent. The head yield of these ~reatments ranged from 207.45 to 216.36 q/ha with
    91.27 to 99.48 per cent Increase over untreated check. Net profit varied from RS.25407 to Rs.27790 and benefit-cost ratio
    ranged from 5.17: 1 to 6.07: 1 in these three treatments.</dcvalue>
  <dcvalue element="description" qualifier="none">Th-3228</dcvalue>
</dublin_core>
```

Bitstream file : The actual file. Like here pdf file 'Th-3228.pdf'
Now copy this folder, containing folders of records to Krishikosh server .
Change to this path : /home/dspace/dspace-ins/bin
& run the following command :
./dspace import --add --eperson=**EmailID** --collection=**collectionHandleNo.** --source=**SourceFolderPath** --mapfile=**LogFilePath**
EmailID : email ID of the person , having rights of submission of the colletion.
collectionHandleNo. : Handle No. of the Collection to which Bulk Uploading is to be done.
This can be taken by going to the collection where new records to be imported and copy the Handle No. from the URL , as shown below, here We have taken Collection, Thesis from Community Orissa University of Agricultural & Technology. From URL handle no. of this collection is "1/88098"

SourceFolderPath :Path of the Folder containing files to be imported.
LogFilePath : Path where log file can be created for tracking any error if occurred.
Eg. /dspace import --add --eperson=maulib_2007@rediffmail.com --collection=1/5810016349 --source=/iari/VNMKV --mapfile=/home/dspace/002

Harvesting in Krishikosh

The Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) is a low-barrier mechanism for repository interoperability. *Data Providers* are repositories that expose structured metadata via OAI-PMH. *Service Providers* then make OAI-PMH service requests to harvest that metadata.The OAI-PMH requests are as follows.

- GetRecord retrieve an individual metadata record from a repository.
- Identify retrieve information about a repository.
- ListIdentifiers an abbreviated form of ListRecords which retrieves only headers rather than records.
- ListMetadataFormats retrieve the metadata formats available from a repository, or optionally the formats available for a specific item.
- ListRecords harvest records from a repository.
- ListSets retrieve the set structure of a repository.

In Krishikosh, OAI-PMH is configured to link the data from other repository to itself and provide its own data to other repositories. In harvesting, OAI link is required to fetch data from other repository, where OAI-PMH is enabled. The procedure for harvest the matadata is under progress

Development of Keyword Extraction Tool (KET)

If we wanted to know what a document or piece of text is about without reading the entire thing, we can do so using keywords. Keywords, in this context, are words or short phrases that concisely describe the contents of a larger text. Keywords are list of significant words or terms that best present the document context in brief and relate to the textual context. Here introduces a model for extracting keywords based on their relatedness weight among the entire text terms. Strength of terms relationship is evaluated by frequency of word.

Why do we need keywords?

- To concisely represent the essential contents of a text/document.
- To fetch relevant documents using keywords in an Information Retrieval (IR) system.
- To improve the presentation of a document (say, by highlighting important phrases).
- To help classify documents.

Normally, keywords are manually chosen by the authors or publishers of a document. Personal experience has proven to me that this is a tedious activity, especially when multiple documents are involved. There are ways for computers to quickly and reasonably accurately do the work for us. The task of automatically identifying the most suitable terms (from the words used in the document) that describe a document is called keyword extraction.

The hallmarks of the KET (Keyword extraction tool) algorithm are

- Its ability to operate independently on documents without referring to a corpus (domain independence); and
- It's very reasonable precision despite its simplicity and computational efficiency.

KEA is built on the observation that keywords usually contain multiple informative words (called content words) but not punctuation and stop words. So, in a document about various corn-based foods, "corn fritters", "popcorn" and "corn flakes" might appear as keywords while "corn on the cob" wouldn't be considered because it has two very common stop words: "on" and "the". The entire algorithm is as follows.

Given an input document, on which we want to extract keywords,

1. Split the document into an array of words, breaking it at word delimiters (like spaces and punctuation).
2. Split the words into sequences of contiguous words, breaking each sequence at a stop word. Each sequence is now a "candidate keyword".

Let's see what we have so far.

Consider the short text "A scoop of ice cream." We break this into words to get

["A", "scoop", "of", "ice", "cream"]

Step 2 arranges these words into sequences by avoiding stop words. The words “A” and “of” are bound to be on any stop list you’re using. So, by reading the array from left to right, skipping stop words, and creating a new candidate keyword every time a stop word is encountered, we obtain two candidate keywords:

["scoop", "ice cream"]

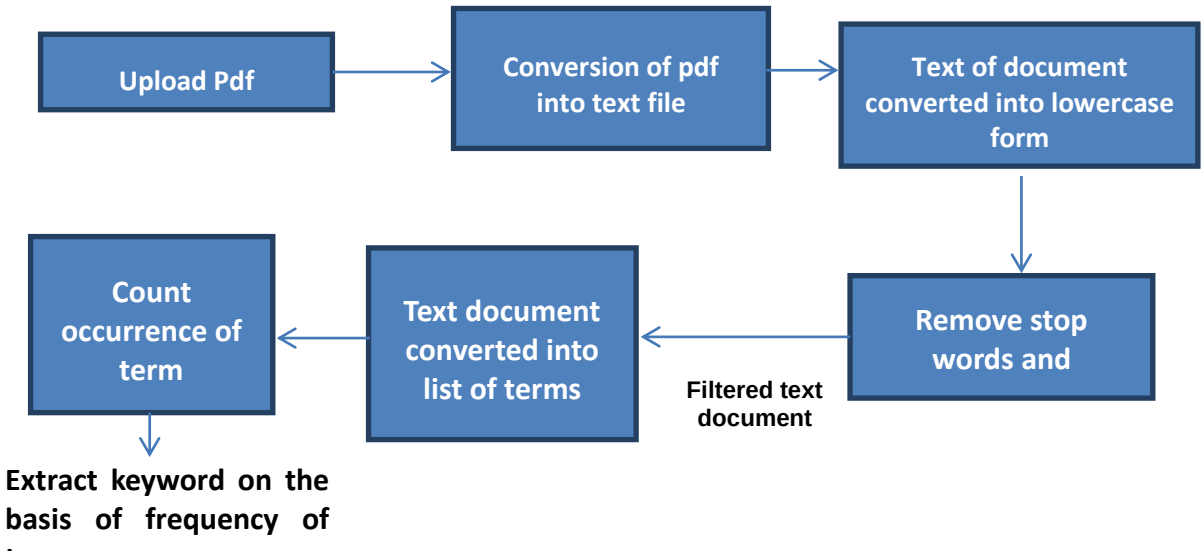
Now back to the algorithm.

Step 3 Calculate the “score” of each individual word in the list of candidate keywords. This is calculated using the metric:

Frequency (word)

It’s easy to understand what the frequency of a word is. It’s simply the number of times the word occurs in the entire list of candidate keywords. So our word frequencies are:

Frequency ("scoop") = 1
Frequency ("ice") = 1
Frequency ("cream") = 1



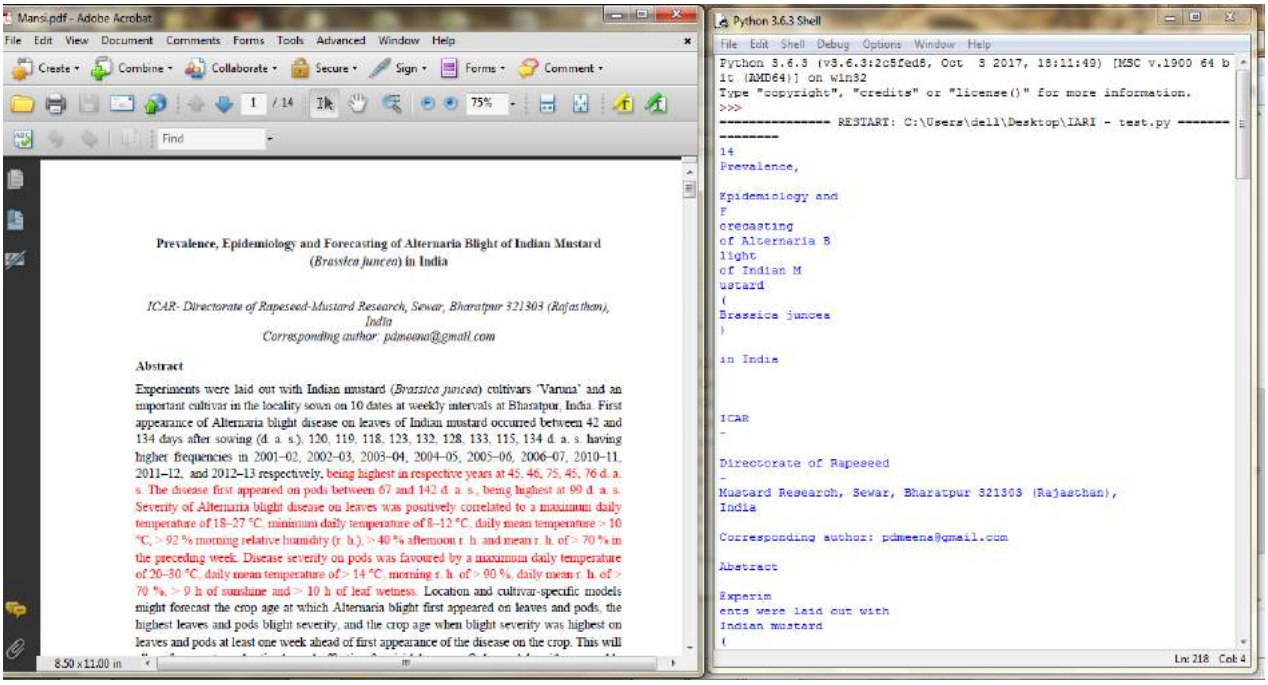
Flow of Keyword Extraction Tool

Implementation of Keyword Extraction Tool

For implementation of tool Python 3.6.3 programming language is used. Python is a general purpose programming language. Python is designed with features to facilitate data analysis and visualization. Python is a general purpose and high level programming language. Python can use for developing desktop GUI applications, websites and web applications. Also, Python, as a high level programming language, allows you to focus on core functionality of the application by taking care of common programming tasks. It is use for developing complex scientific and numeric applications. The simple syntax rules of the programming language further makes it easier for you to keep the code base readable and application maintainable. These features help to developed keyword extraction tool. There are also a number of reasons for prefer Python to other programming languages.

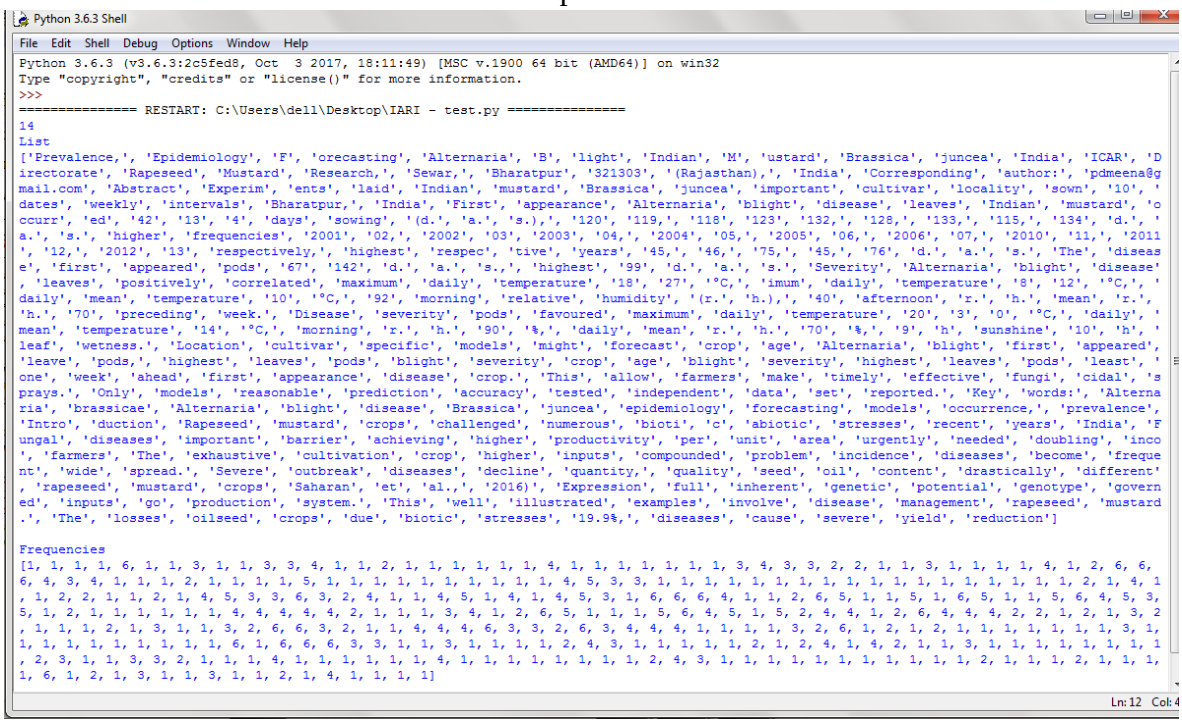
1) **Readable and Maintainable Code**
2) **Multiple Programming Paradigms**
3) **Compatible with Major Platforms and System**
4) **Many Open Source Frameworks and Tools**
5) **Simplify Complex Software Development**

1. For implementation of this tool in first step we read the pdf of thesis and converted it into text form. Document convert remaining text into lowercase alphabet so that uniformity should be maintained in document and split document in list of alphabet.



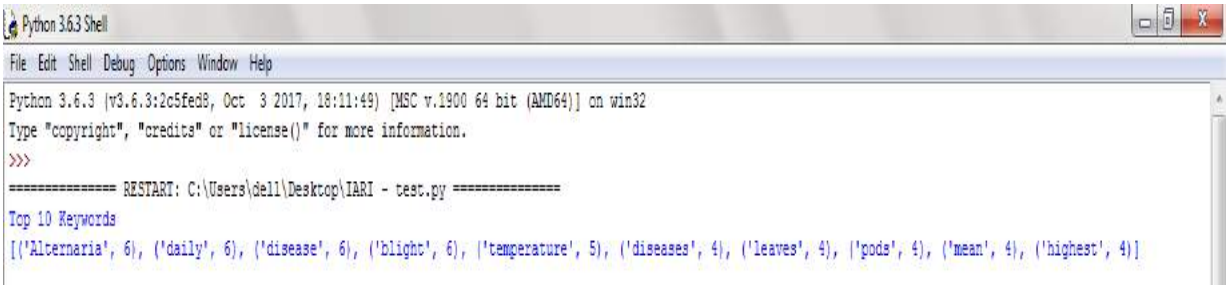
2. For extraction of keyword from converted text document first we filter the document by removing space, punctuations ('.', ',', "", """), stop words. A stop word is a commonly used word (such as “the”, “a”, “an”, “in”) that a tool has been programmed to ignore.

3. After getting list of alphabets, repetition of word is counted in the list, which we called frequency of word. Form this procedure we count frequency of words through which we can extract keywords on basis of maximum occurrence of word in particular document.



4. For getting more precise results pair of keyword and their frequency is displayed with top keywords list, which having list of keywords having maximum frequency in the document.


Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\dell\Desktop\IARI - test.py ==========
Pairs
[('daily', 6), ('disease', 6), ('Alternaria', 6), ('blight', 6), ('temperature', 5), ('highest', 4), ('mustard', 4), ('diseases', 4), ('India', 4), ('leaves', 4), ('mean', 4), ('pods', 4), ('severity', 3), ('The', 3), ('crop', 3), ('Brassica', 3), ('first', 3), ('higher', 3), ('juncea', 3), ('models', 3), ('crops', 3), ('Indian', 3), ('important', 2), ('cultivar', 2), ('age', 2), ('This', 2), ('maximum', 2), ('appeared', 2), ('appearance', 2), ('morning', 2), ('farmers', 2), ('45,', 2), ('years', 2), ('inputs', 2), ('Rapeseed', 2), ('rapeseed', 2), ('stresses', 2), ('Prevalence,', 1), ('2002', 1), ('ICAR', 1), ('production', 1), ('severe', 1), ('115,', 1), ('06,', 1), ('per', 1), ('2012', 1), ('118', 1), ('least', 1), ('reported.', 1), ('reasonable', 1), ('yield', 1), ('02,', 1), ('decline', 1), ('inherent', 1), ('duction', 1), ('orecasting', 1), ('First', 1), ('exhaustive', 1), ('management', 1), ('Corresponding', 1), ('losses', 1), ('data', 1), ('crop.', 1), ('week.', 1), ('Epidemiology', 1), ('11,', 1), ('barrier', 1), ('imum', 1), ('unit', 1), ('Experim', 1), ('Expression', 1), ('full', 1), ('Intro', 1), ('occurr', 1), ('genotype', 1), ('dates', 1), ('occurrence,', 1), ('illustrated', 1), ('numerous', 1), ('days', 1), ('quality', 1), ('involve', 1), ('2016)', 1), ('s.),', 1), ('ents', 1), ('tested', 1), ('weekly', 1), ('(d.', 1), ('ahead', 1), ('independent', 1), ('problem', 1), ('prediction', 1), ('become', 1), ('seed', 1), ('drastically', 1), ('Sewar,', 1), ('19.9%,', 1), ('pods,', 1), ('words:', 1), ('reduction', 1), ('make', 1), ('Severe', 1), ('well', 1), ('forecasting', 1), ('al.,', 1), ('Directorate', 1), ('134', 1), ('Research,', 1), ('mustard.', 1), ('preceding', 1), ('challenged', 1), ('frequent', 1), ('effective', 1), ('correlated', 1), ('Bharatpur,', 1), ('(r.', 1), ('Key', 1), ('locality', 1), ('respec', 1), ('brassicae', 1), ('due', 1), ('week', 1), ('Only', 1), ('inco', 1), ('prevalence', 1), ('ustard', 1), ('05,', 1), ('2011', 1), ('humidity', 1), ('specific', 1), ('2003', 1), ('sown', 1), ('intervals', 1), ('favoured', 1), ('132,', 1), ('sunshine', 1), ('pdmeena@gmail.com', 1), ('bioti', 1), ('s.,', 1), ('area', 1), ('compounded', 1), ('spread.', 1), ('examples', 1), ('fungi', 1), ('abiotic', 1), ('321303', 1), ('urgently', 1), ('sowing', 1), ('needed', 1), ('potential', 1), ('leave', 1), ('leaf', 1), ('oil', 1), ('Severity', 1), ('Fungal', 1), ('relative', 1), ('biotic', 1), ('quantity,', 1), ('Disease', 1), ('productivity', 1), ('laid', 1), ('content', 1), ('afternoon', 1), ('author:', 1), ('outbreak', 1), ('might', 1), ('(Rajasthan),', 1), ('04,', 1), ('128,', 1), ('2001', 1), ('2005', 1), ('h.),', 1), ('142', 1), ('frequencies', 1), ('forecast', 1), ('119,', 1), ('genetic', 1), ('12,', 1), ('75,', 1), ('allow', 1), ('2004', 1), ('governed', 1), ('wetness.', 1), ('Location', 1), ('Mustard', 1), ('respectively,', 1), ('2010', 1), ('set', 1), ('one', 1), ('133,', 1), ('120', 1), ('wide', 1), ('cause', 1), ('cidal', 1), ('achieving', 1), ('Abstract', 1), ('123', 1), ('recent', 1), ('timely', 1), ('accuracy', 1), ('tive', 1), ('Saharan', 1), ('sprays.', 1), ('Bharatpur', 1), ('positively', 1), ('oilseed', 1), ('light', 1), ('doubling', 1), ('cultivation', 1), ('46,', 1), ('epidemiology', 1), ('different', 1), ('07,', 1), ('incidence', 1), ('system.', 1), ('2006', 1)]
Top 10 Keywords
[('daily', 6), ('disease', 6), ('Alternaria', 6), ('blight', 6), ('temperature', 5), ('highest', 4), ('mustard', 4), ('diseases', 4), ('India', 4), ('leaves', 4)]
>>>
Ln: 11 Col: 4


Python 3.6.3 Shell
File Edit Shell Debug Options Window Help
Python 3.6.3 (v3.6.3:2c5fed8, Oct 3 2017, 18:11:49) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:\Users\dell\Desktop\IARI - test.py ==========
Top 10 Keywords
[('Alternaria', 6), ('daily', 6), ('disease', 6), ('blight', 6), ('temperature', 5), ('diseases', 4), ('leaves', 4), ('pods', 4), ('mean', 4), ('highest', 4)]

Achievements with good quality photographs

- ✓ Prepared a Roadmap brochure of ICAR-NAHEP Sub Project on "National Knowledge Management Centre for Agricultural Education Research".
- ✓ Taken up the Implementation of KOHA Integrated Library Management System in AUs.
- ✓ Disaster Management Recovery (DMR) Server has been installed and customized for the purpose of Krishikosh Mirror Server.
- ✓ Initiated creation of 'App for Library'.
- ✓ Created profiles in World Bank STEP Module for obtaining permissions for procurements. Uploaded procurement plans of all partners.
- ✓ Organized sensitization workshops/training programmes for stakeholders and library professionals.
- ✓ Designed MOOCs course for library users and library professionals.
- ✓ Release of Manual on Koha-Open source integrated library management system software during the National Training Programme.
- ✓ Release of Live DVD on Koha- Open source integrated library management system software
- ✓ Live training session organized for Implementation of Koha-Open source integrated library Management system software by the experts.
- ✓ Release of Manual on **e-Resources under NARES**
- ✓ Guest lecturers organized during the sensitization workshop
- ✓ **410** Theses & Created Metadata successfully uploaded in Krishikosh Repository under e-granth of NARES.
- ✓ **470** Theses & created metadata in pipeline for uploading on Krishikosh Repository under e-granth of NARES.



Photos: Launch Workshop On 8th August, 2018 at University Library , PJTSAU, Rajendranagar, Hyderabad under NAHEP(IG) on NKMC4AER

డిజిటల్ సాంకేతిక విప్లవంతో గ్రంథాలయ సేవల విస్తృతి: డా.ఆర్.బి.శర్మ

విద్యార్థులకు మెరుగైన గ్రంథాలయ సేవలు

వ్యవసాయ పరిశోధనా మండలి సహకారం • నేషనల్ కోఆర్డినేటర్ డాక్టర్ ఆర్బీ శర్మ

'గ్రంథాలయాల్లో ఆధునిక డిజిటల్ సాంకేతిక పరిజ్ఞానాన్ని వినియోగించుకోవాలి'

ప్రాజెక్ట్ లాంచింగ్ బ్రోచర్‌ను విడుదల చేస్తున్న డాక్టర్ శర్మ

Workshop on agri education & research held

OUR BUREAU

వ్యవసాయ విద్యార్థులకు మెరుగైన గ్రంథాలయ సేవలు

• వ్యవసాయ ఉన్నత విద్య ప్రాజెక్టు జాతీయ కో-ఆర్డినేటర్ డాక్టర్ వీఆర్ శర్మ

బ్రోచర్‌ను విడుదల చేస్తున్న అతిథులు

సాంకేతిక పరిజ్ఞానంతో లైబ్రరీ సేవలు

• డాక్టర్ ఆర్బీ శర్మ

సదస్సులో పాల్గొన్న అధికారులు

Photos: Launch Workshop On 8th August, 2018 at University Library , PJTSAU, Rajendranagar, Hyderabad under NAHEP(IG) on NKMC4AER

Photo: Training cum Sensitization Workshop on "Krishikosh Repository –a Tool for Strengthening Agricultural Knowledge" was organized by ICAR-IARI, New Delhi and Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh On 30th October, 2018. This training programe was inaugurated by Dr (Ms) AnjuSudhakarKhanna, Librarian, Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, 325 students and faculty attended this programe. Half day hands on training programe for uses as well as trouble-shoot for Krishikosh repository for the librarian and staff of library of this university was also conducted.

Pictures: National Training Programme on "Implementation of KOHA and User Friendly Interface OPAC" from 14th to 15th December, 2018 at Sri Venkateswara Veterinary University, Tirupati.

Photo: Training cum Sensitization Workshop on "Krishikosh Repository for Strengthening Agricultural Knowledge in NARES" Under sub- project entitled "National Knowledge Management Centre for Agriculture Education and Research" under Innovation Grant of National Agricultural Higher Education Project, ICAR, New Delhi organized by ICAR-IARI, New Delhi and GBPUAT, Pantnagar, during 18 December, 2018. This training programe was inaugurated by Dean College of Technology, Dr. J.P. Pandey and Dr. T. P. Singh, In-Charge, University Library. Krishikosh Repository for Strengthening Agricultural Knowledge in NARES was presented to thestudents and faculties of university. 138 students and faculty attended this programe.

Photo: Implementation of KOHA and creation of user friendly interface – OPAC on 28-29 January, 2019 at college of Vet. Sci, AAU, Khanapara, Guwahati.

Photo: Agricultural Knowledge management tools in the network digital environment 30 January, 2019 at college of Vet. Sci, AAU, Khanapara, Guwahati.

Pictures: National Level Capacity Building Workshop for Librarians of SAUs from 5th to 9th February, 2019 at University Library, PJTSAU, Rajendranagar, Hyderabad.

'గ్రంథాలయాలు మారాలి'

వీసీ డాక్టర్ ప్రవీణ్‌రావు

రాజేంద్రనగర్, ఫిబ్రవరి 5 (ఆంధ్రజ్యోతి): మారుతున్న పరిస్థితులకు అనుగుణంగా గ్రంథాలయాలు మారాలని భారతీయ వ్యవసాయ పరిశోధన మండలి డిప్యూటీ డైరెక్టర్ జనరల్(విద్య) డాక్టర్ నరేంద్రసింగ్ రాథోర్ అన్నారు. అందుబాటులో ఉన్న ఎలక్ట్రానిక్ టెక్నాలజీలన్నింటినీ విరివిగా ఉపయోగించుకుని గ్రంథాలయాలు 24గంటల సేవలందించేలా రూపాంతరం చెందాలని ఆయన సూచించారు. మంగళవారం నుంచి ఐదురోజుల పాటు రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయాల లైబ్రేరియన్‌లకు నిర్వహిస్తున్న నేషనల్ లెవల్ కెపాసిటీ బిల్డింగ్ వర్క్‌షాపును ఆయన ప్రారంభించారు. ఐసీఏఆర్, ప్రొఫెసర్ జయశంకర్ తెలంగాణ వ్యవసాయ విశ్వవిద్యాలయం సంయుక్తంగా ఈ సదస్సును నిర్వహిస్తున్నాయి. ఈ సందర్భంగా ఆయన మాట్లాడుతూ నేర్చుకోవడం నిరంతర ప్రక్రియ అని, నేర్చుకోవడం మానేసిన నాడు విద్యావంతులు కూడా నిరక్షరాస్యులుగా మారిపోతారన్నారు. గ్రంథాలయాలకు ప్రత్యేక బడ్జెట్ ఉండేందుకు ఐసీఏఆర్ కృషి చేస్తున్నట్లు వివరించారు. వ్యవసాయ విశ్వవిద్యాలయం ఉప కులపతి డాక్టర్ వి.ప్రవీణ్‌రావు, లైబ్రేరియన్ వీరాంజనేయులు సమర్థవంతంగా పనిచేస్తున్నారని అభినందించారు. డాక్టర్ వి.ప్రవీణ్‌రావు మాట్లాడుతూ విశ్వవిద్యాలయం లైబ్రరీ పేరును నాలెడ్జ్ మేనేజ్‌మెంట్ సెంటర్‌గా మార్చుతున్నట్లు ప్రకటించారు. వీరాంజనేయులు మాట్లాడుతూ యూనివర్సిటీ లైబ్రరీలో అందరికీ అవసరమైన సేవలు అందిస్తున్నామన్నారు. కార్యక్రమంలో విస్తరణ సంచాలకులు డాక్టర్ రాజిరెడ్డి, డీన్ ఆఫ్ స్టూడెంట్ అఫైర్స్ డాక్టర్ విష్ణువర్ధన్‌రెడ్డి, కంట్రోలర్ రమేశ్, వివిధ విశ్వవిద్యాలయాల లైబ్రేరియన్‌లు పాల్గొన్నారు.

ఆంధ్రజ్యోతి Wed, 06 February 2019 https://epaper.andhrajyothy.com/c/364743

నేర్చుకోవడం నిరంతర ప్రక్రియ

ఐసీఏఆర్ డిప్యూటీ డైరెక్టర్ జనరల్ డా. నరేంద్రసింగ్ రాథోర్

మన హైదరాబాద్ Wed, 06 February 2019 epaper.manatelangana.news/c/36475367

మారుతున్న పరిస్థితులకు అనుగుణంగా గ్రంథాలయాలు మారాలి : రాథోడ్

వర్క్‌షాప్‌లో పాల్గొన్న డా.నరేంద్రసింగ్ రాథోడ్, తదితరులు

రాజేంద్రనగర్, ఫిబ్రవరి 5 (ప్రభ న్యూస్) : మారుతున్న పరిస్థితులకు అనుగుణంగా గ్రంథాలయాలు మారాలని భారతీయ వ్యవసాయ పరిశోధనా మండలి డిప్యూటీ డైరెక్టర్ జనరల్(విద్య) డాక్టర్ నరేందర్ సింగ్ రాథోడ్ అన్నారు. అందుబాటులో ఉన్న ఎలక్ట్రానిక్ టెక్నాలజీలు అన్నింటిని విరివిగా వినియోగించుకొని గ్రంథాలయాలు 24 గంటలు సేవలు అందించేవిధంగా రూపాంతరం చెందాలని ఆయన సూచించారు. ఐదు రోజులపాటు రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయాల గ్రంథాలయ పాలకులకు నిర్వహిస్తున్న నేషనల్ లెవల్ కెపాసిటీ బిల్డింగ్ వర్క్‌షాప్‌ను ఆయన ప్రారంభించారు. ఐసీఏఆర్ ప్రొఫెసర్ జయశంకర్ వ్యవసాయ విశ్వద్యాలయం సంయుక్తంగా ఈ సదస్సును ప్రొఫెసర్ జయశంకర్ వ్యవసాయ వర్సిటీ గ్రంథాలయంలో నిర్వహిస్తున్నాయి. నేర్చుకోవడం నిరంతర ప్రక్రియ అని, నేర్చుకోవడం మానివేసిన నాడు విద్యావంతులు నిరాక్షరాసులుగా మారిపోతారని, గతంలో కేవలం పుస్తకాల నిల్వ కేంద్రాలుగా ఉండే లైబ్రేరీలు నేడు డిజిటల్ టెక్నాలజీ ఆర్టిఫిషియల్ ఇంటలిజెన్స్ తదితర టెక్నాలజీలను ఉపయోగించుకొని అనుక్షణం విజ్ఞాన్ని పంచే కేంద్రాలుగా మారాల్సిన అవసరం ఎంతైనా ఉందన్నారు. గ్రంథాలయాలకు ప్రత్యేక బడ్జెట్ ఉండేందుకు ఐసీఏఆర్ కృషి చేస్తున్నట్లు తెలిపారు. పీజేటీఎస్‌యూ ఉపకులపతి డాక్టర్ ప్రవీణ్ రావు వర్సిటీ అభివృద్ధికి చేస్తున్నారని ప్రశంసించారు.

అదేవిధంగా పీజేటీ ఎస్‌ఏయూ లైబ్రేరియన్ వీరాంజనేయులు గ్రంథాలయాన్ని సమర్థవంతంగా నిర్వర్తిసున్నారని వెల్లడించారు. విద్యార్థులు, ప్రొఫెసర్లు, పరిశోధకులు, రైతులకు విధానకర్తలకు విజ్ఞాన్ని పంచే కేంద్రాలుగా లైబ్రేరీలు మారాలని ఉపకులపతి డాక్టర్ వి.ప్రవీణ్ రావు అభిప్రాయపడ్డారు. అందుకే విశ్వవిద్యాలయంలైబ్రేరీ పేరును నాలెడ్జ్ మేనేజిమెంట్‌సెంటర్‌గా మారుస్తున్నట్లుగా ఆయన ప్రకటించారు.

అంతేకాకుండా 20 నుంచి 25 లాప్‌టాప్‌లు, రూమ్ ఏర్పాటు చేస్తున్నట్లు ప్రకటించారు. ఈ కార్యక్రమంలో గ్రంథా పాలకుడు డాక్టర్ వీరాంజనేయులు విస్తరణ సంచాలకులు డాక్టర్ రాజిరెడ్డి, డాక్టర్ విష్ణువర్ధన్ రెడ్డి, డాక్టర్ రమేష్, విశ్వవిద్యాలయాల లైబ్రేరీయన్‌లు తదితరులుపాల్గొన్నారు.

Wed, 06 February 2019 epaper.prabhanews.com/c/36475186

ఈనాడు

గ్రంథాలయాలు సాంకేతిక కేంద్రాలుగా మారాలి

కార్యశాలలో పాల్గొన్న గ్రంథపాలకులతో ఎన్.ఎస్.రాథోడ్, ప్రవీణ్‌రావు

సౌర విద్యుత్తు ప్లాంట్‌ను సందర్శించిన డీడీజీ

Date : 06/02/2019 EditionName : TELANGANA(HYDERABAD) PageNo : Page 07

లైబ్రరీలు డిజిటల్‌గా మారాలి

- వ్యవసాయ పరిశోధనా మండలి డిప్యూటీ డైరెక్టర్ జనరల్ నరేంద్రసింగ్ రాథోర్

వ్యవసాయ వర్సిటీలో నేషనల్ లెవల్ బిల్డింగ్ వర్క్‌షాప్‌ను ప్రారంభిస్తున్న వ్యవసాయ పరిశోధన మండలి డిప్యూటీ డైరెక్టర్ జనరల్ నరేంద్రసింగ్ రాథోర్, వీసీ ప్రవీణ్‌రావు తదితరులు

హైదరాబాద్, నమస్తేతెలంగాణ : గ్రంథాలయాలు సాంకేతికతను అందిపుచ్చుకొని అనుక్షణం విజ్ఞానం పంచే కేంద్రాలుగా మారాలని భారతీయ వ్యవసాయ పరిశోధన మండలి డిప్యూటీ డైరెక్టర్ జనరల్ (విద్య) డాక్టర్ నరేంద్రసింగ్ రాథోర్ అన్నారు. అందుబాటులో ఉన్న సాంకేతిక పరిజ్ఞానాన్ని వినియోగించుకొని 24 గంటల పాటు సేవలందించాలని అన్నారు. వ్యవసాయ వర్సిటీలో గ్రంథపాలకులకు నిర్వహిస్తున్న నేషనల్ లెవెల్ బిల్డింగ్ వర్క్‌షాప్‌ను మంగళవారం ఆయన ప్రారంభించి మాట్లాడుతూ గతంలో కేవలం పుస్తకాల నిల్వ కేంద్రాలుగా ఉండే లైబ్రరీలు నేడు డిజిటల్ టెక్నాలజీ, ఆర్టిఫిషియల్ ఇంటెలిజెన్స్‌ను ఉపయోగించుకొని అనుక్షణం విజ్ఞానాన్ని పంచే కేంద్రాలుగా మారాల్సిన అవసరం ఏర్పడిందని చెప్పారు. విద్యార్థులు, ప్రొఫెసర్లు, పరిశోధకులు, రైతులకి, విధానకర్తలకి విజ్ఞానాన్ని పంచే కేంద్రాలుగా లైబ్రరీలు మారాలని వ్యవసాయ విశ్వవిద్యాలయం ఉపకులపతి డాక్టర్ వీ ప్రవీణ్‌రావు అభిప్రాయపడ్డారు. అందుకే ఇకపై విశ్వవిద్యాలయం పేరును 'నాలెడ్జ్ మేనేజ్‌మెంట్‌సెంటర్'గా మార్చుతున్నట్టు ప్రకటించారు. వర్సిటీ లైబ్రేరియన్ వీరాంజనేయులు మాట్లాడుతూ గతంలో తిరుపతి, అసోంలో శిక్షణ కార్యక్రమాలు పూర్తయ్యాయని, ఇది మూడోదని చెప్పారు. వర్సిటీ ఎలాంటి నిధులు వెచ్చించకుండా 25 ఏండ్లపాటు సౌరవిద్యుత్తు వినియోగించుకొనేలా ప్రైవేటు సంస్థతో ఒప్పందం చేసుకున్నదని వైస్‌చాన్స్‌లర్ ప్రవీణ్‌రావు తెలుపగా ఎన్ఎస్ రాథోడ్ అభినందించారు. ఈ కార్యక్రమంలో విస్తరణ సంచాలకుడు రాజిరెడ్డి, డీన్ ఆఫ్ స్టూడెంట్స్ అఫైర్స్ డాక్టర్ విష్ణువర్ధన్‌రెడ్డి, కంట్రోలర్ రమేశ్ తదితరులు పాల్గొన్నారు.

నమస్తే తెలంగాణ Wed, 06 February 2019 https://epaper.ntnews.com/c/36452074

సాక్షి

ప్రస్తుత పరిస్థితులకి తగ్గట్లు లైబ్రరీలు ఉండాలి

- ఐసీఏఆర్ డిప్యూటీ డైరెక్టర్ జనరల్ డాక్టర్ నరేంద్రసింగ్ రాథోర్
- లైబ్రేరియన్స్‌కి నేషనల్ లెవల్ కెపాసిటీ బిల్డింగ్ వర్క్‌షాప్ ప్రారంభం

సదస్సులో పాల్గొన్న భారతీయ వ్యవసాయ పరిశోధన మండలి డిప్యూటీ డైరెక్టర్ జనరల్ (విద్య) డాక్టర్ నరేంద్రసింగ్ రాథోర్, ఉపకులపతి డాక్టర్ ప్రవీణ్‌రావు తదితరులు

సాక్షి Wed, 06 February 2019 https://epaper.sakshi.com/c/36460605

వార్త

రైతాంగానికి టెక్నాలజీని అందించడంలో గ్రంథాలయాలు కీలక పాత్ర పోషించాలి

రాష్ట్ర ఉన్నత విద్యామండలి ఛైర్మన్ టి.పాపి రెడ్డి.

Sun, 10 February 2019
https://epaper.vaartha.com/c/36619232

ఈనాడు

రైతులకు పుస్తక రూపంలో విజ్ఞానాన్ని అందించాలి

Date : 10/02/2019 EditionName : TELANGANA(HYDERABAD) PageNo : Page 09

వ్యవసాయ వర్సిటీలో ముగిసిన వర్క్‌షాపు

రైతాంగానికి టెక్నాలజీని అందించడంలో గ్రంథాలయాలు కీలక పాత్ర పోషించాలి

రాష్ట్ర ఉన్నత విద్యామండలి ఛైర్మన్ టి.పాపి రెడ్డి.

ముగిసిన గ్రంథాలయ సదస్సు

రైతాంగానికి సాంకేతిక పరిజ్ఞానాన్ని అందించాలి

Pictures: National Level Capacity Building Workshop for Librarians of SAUs from 5th to 9th February, 2019 at University Library, PJTSAU, Rajendranagar, Hyderabad.

Pictures: Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment at College of Agriculture, Rajendranagar on 15th February, 2019

పరిశోధనల్లో మెరుగైన ఫలితాలు సాధించాలి

రాజేంద్రనగర్, ఫిబ్రవరి 15 (ఆంధ్రజ్యోతి): అగ్రికల్చరల్ నాలెడ్జ్ మేనేజ్‌మెంట్ టూల్స్ ఇన్ ద నెట్‌వర్క్ డిజిటల్ ఎన్విరాన్‌మెంట్ అంశంపై రాజేంద్రనగర్ వ్యవసాయ కళాశాల అధ్యాపకులకు శుక్రవారం అవగాహన కార్యక్రమం నిర్వహించారు. జాతీయ వ్యవసాయ ఉన్నత విద్యావధకం, ప్రాపెసర్ జయశంకర్ తెలంగాణ రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయం, కేంద్ర గ్రంథాలయం ఆధ్వర్యంలో రాజేంద్రనగర్ వ్యవసాయ కళాశాల వర్చువల్ క్లాస్‌రూమ్‌లో శుక్రవారం ఒక్కరోజు అవగాహన కార్యక్రమం ప్రారంభమైంది. యూనివర్సిటీ లైబ్రేరియన్ డాక్టర్ వీరాంజనేయులు అధ్యక్షతన జరిగిన కార్యక్రమం విద్యార్థి వ్యవహారాల డీన్ డాక్టర్ విష్ణు వర్ధన్‌రెడ్డి ముఖ్యఅతిథిగా పాల్గొన్నారు. ఆధునిక డిజిటల్ లెర్నింగ్ పద్ధతులు, సమాచార సేకరణ పద్ధతులు బోధన, పరిశోధనలో మెరుగైన

కార్యక్రమంలో మాట్లాడుతున్న వి.విష్ణువర్ధన్‌రెడ్డి

కార్యక్రమంలో పాల్గొన్న గ్రంథాలయాల సిబ్బంది

ఫలితాలు పొందడానికి వినియోగించుకోవాలని డాక్టర్ విష్ణువర్ధన్‌రెడ్డి సూచించారు.

ఈ రిసోర్స్ ఇన్ అగ్రికల్చర్ అన్న అంశంపై డాక్టర్ వీరాంజనేయులు ప్రసంగించారు. వ్యవసాయ కళాశాల అసోసియేట్ డీన్ డాక్టర్ సత్యనారాయణ స్వాగతోపన్యాసం చేయగా అసిస్టెంట్ ప్రొఫెసర్ లైబ్రరీ సైన్స్ ఎస్.వి.రవికుమార్ తదితరులు పాల్గొన్నారు.

డిజిటల్ ఎన్విరాన్‌మెంట్‌పై అధ్యాపకులకు అవగాహన

కార్యక్రమానికి హాజరైన అధ్యాపకులు

రాజేంద్రనగర్: అగ్రికల్చరల్ నాలెడ్జ్ మేనేజ్‌మెంట్ టూల్స్ ఇన్ ద నెట్‌వర్క్ డిజిటల్ ఎన్విరాన్‌మెంట్ అంశంపై రాజేంద్రనగర్ వ్యవసాయ కళాశాల అధ్యాపకులకు శుక్రవారం అవగాహన కార్యక్రమం నిర్వహించారు. జాతీయ వ్యవసాయ ఉన్నత విద్యావధకం, ప్రాపెసర్ జయశంకర్ తెలంగాణ రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయం, కేంద్ర గ్రంథాలయం ఆధ్వర్యంలో రాజేంద్రనగర్ వ్యవసాయ కళాశాలలో శుక్రవారం ఉదయం ఒక్క రోజు అవగాహన కార్యక్రమం నిర్వహించారు. యూనివర్సిటీ లైబ్రేరియన్ డాక్టర్ కె.వీరాంజనేయులు అధ్యక్షతన నిర్వహించిన ఈ అవగాహన కార్యక్రమానికి విశ్వవిద్యాలయ విద్యార్థి వ్యవహారాల డీన్ డాక్టర్ విష్ణువర్ధన్‌రెడ్డి ముఖ్య అతిథిగా హాజరయ్యారు. ఆధునిక డిజిటల్ లెర్నింగ్ పద్ధతులు, సమాచార సేకరణ పద్ధతులను బోధన, పరిశోధనలో మెరుగైన ఫలితాలను పొందడానికి వినియోగించుకోవాలని సూచించారు. ఈ కార్యక్రమంలో వ్యవసాయ కళాశాల అసోసియేట్ డీన్ డాక్టర్ సత్యనారాయణ, అసిస్టెంట్ ప్రొఫెసర్ లైబ్రేరియన్ ఎస్.వి.రవికుమార్ తదితరులు పాల్గొన్నారు.

ఆధునిక పద్ధతులు వినియోగించుకోవాలి

సమావేశంలో మాట్లాడుతున్న డాక్టర్ విష్ణువర్ధన్‌రెడ్డి

రాజేంద్రనగర్, న్యూస్‌టుడే: బోధన, పరిశోధనలో మెరుగైన ఫలితాలు రాబట్టడానికి ఆధునిక డిజిటల్, సమాచార సేకరణ పద్ధతులను వినియోగించుకోవాలని డాక్టర్ విష్ణువర్ధన్‌రెడ్డి అన్నారు. 'అగ్రికల్చరల్ నాలెడ్జ్ మేనేజ్‌మెంట్ టూల్స్ ఇన్ ది నెట్‌వర్క్ డిజిటల్ ఎన్విరాన్‌మెంట్' అంశంపై రాజేంద్రనగర్ వ్యవసాయ కళాశాల అధ్యాపకులకు శుక్రవారం అవగాహన కార్యక్రమం నిర్వహించారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ.. మారుతున్న పరిస్థితులకు అనుగుణంగా బోధన, పరిశోధనా రంగాల్లో కూడా మార్పులు చేసుకుంటున్నాయన్నారు. ఆధునిక పద్ధతులను అధ్యాపకులు అవలంబిస్తూ, అందుకు అనుగుణంగా బోధన, పరిశోధనలు చేపట్టాలని సూచించారు. జాతీయ వ్యవసాయ ఉన్నత విద్యావధకం, ప్రాపెసర్ జయశంకర్ తెలంగాణ రాష్ట్ర విశ్వవిద్యాలయం, కేంద్ర గ్రంథాలయం ఆధ్వర్యంలో ఈ శిక్షణ కార్యక్రమం నిర్వహించారు. 'ఈ- రిసోర్సెస్ ఇన్ అగ్రికల్చర్' అంశంపై డాక్టర్ వీరాంజనేయులు ప్రసంగించారు. వ్యవసాయ కళాశాల అసోసియేట్ డీన్ డాక్టర్ వీరాంజనేయులు, పి.రవి తదితరులు పాల్గొన్నారు.

'వ్యవసాయంలో డిజిటల్ పద్ధతులను నేర్చుకోవాలి'

సమావేశంలో మాట్లాడుతున్న విష్ణువర్ధన్‌రెడ్డి

రాజేంద్రనగర్, ఫిబ్రవరి 15 (ఆంధ్రజ్యోతి) : అగ్రికల్చరల్ నాలెడ్జ్ మేనేజ్‌మెంట్ టూల్స్ ఇన్ ద నెట్‌వర్క్ డిజిటల్ ఎన్విరాన్‌మెంట్ అనే అంశంపై రాజేంద్రనగర్ వ్యవసాయ విశ్వవిద్యాలయం అధ్యాపకులకు శుక్రవారం అవగాహన కార్యక్రమం నిర్వహించారు. జాతీయ వ్యవసాయ ఉన్నత విద్యా వధకం, ప్రాపెసర్ జయశంకర్ తెలంగాణ రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయం కేంద్ర గ్రంథాలయ ఆధ్వర్యంలో రాజేంద్రనగర్ వ్యవసాయ కళాశాల వర్చువల్ క్లాస్‌రూమ్‌లో ఈ కార్యక్రమం జరిగింది. యూనివర్సిటీ లైబ్రేరియన్ డాక్టర్ కె.వీరాంజనేయులు అధ్యక్షతన జరిగిన కార్యక్రమంలో విద్యార్థి వ్యవహారాల డీన్ డాక్టర్ విష్ణువర్ధన్‌రెడ్డి ముఖ్యఅతిథిగా పాల్గొన్నారు. ఆధునిక డిజిటల్ లెర్నింగ్ పద్ధతులు, సమాచార సేకరణ పద్ధతులను బోధన, పరిశోధనలో మెరుగైన ఫలితాలను పొందడానికి వినియోగించుకోవాలని డాక్టర్ విష్ణువర్ధన్‌రెడ్డి సూచించారు.

ఈ-రీసోర్సెస్ ఇన్ అగ్రికల్చర్ అన్న అంశంపై డాక్టర్ వీరాంజనేయులు ప్రసంగించారు. వ్యవసాయ కళాశాల అసోసియేట్ డీన్ డాక్టర్ సత్యనారాయణ స్వాగతోపన్యాసం చేయగా అసిస్టెంట్ ప్రొఫెసర్ లైబ్రరీ సైన్స్ ఎస్వీ రవికుమార్ వందన సమర్పణ చేశారు.

Pictures: Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment at College of Agriculture, Rajendranagar on 15th February, 2019




Pictures: Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment" at University of Agricultural Sciences, Dharwad on 18th February, 2019


Pictures: User Awareness Programme on "e-Resource in Agriculture" at University Library, UAS, GKVK, Bangalore on 07th March 2019.

Session organised on strengthening digital library in agri research

Participants attend a programme on strengthening digital library in national agricultural research at PAU. TRIBUNE PHOTO

TRIBUNE NEWS SERVICE

LUDHIANA, MARCH 20

Punjab Agricultural University (PAU) and Indian Agricultural Research Institute (IARI), New Delhi, organised a two-day training programme on "Strengthening of digital library in national agricultural research and education system using koha platform" for libraries of state agricultural universities/ICAR institutes under north zone of India.

The training was held under the sub-project "National knowledge management centre for agriculture education and research (NKMCAER)" of the innovation grants of national agricultural higher education project (NAHEP).

A total of 31 participants in the domain of library and information science from various state agricultural universities and deemed universities from the north zone of India participated in the event.

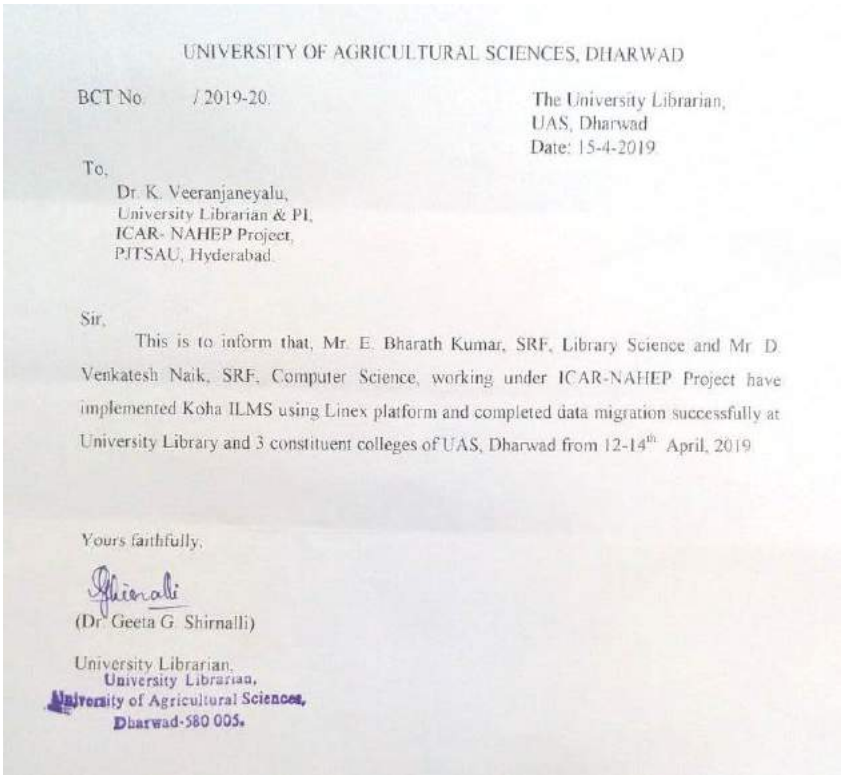
The training was imparted on implementation and use of koha integrated library system in the libraries of agricultural universities/ICAR institutes.

PAU Vice-Chancellor Dr Baldev Singh Dhillon said library automation using koha has facilitated the provision of speedy library services to its users. Dr Jatinder Kumar, an expert in implementation and customisation of koha library management software, imparted extensive training to the participants which included hands-on session as well.

Dr RB Sharma, national coordinator, National Agricultural Higher Education Project, ICAR, stressed upon changing role of libraries in digital era and emphasised that further advancements in this regard were the need of the hour.

Photo: Two days training program on "Strengthening of Digital Library in National Agricultural Research and Education System using KOHA Platform" Under sub- project entitled "National Knowledge Management Centre for Agriculture Education and Research" under Innovation Grant of National Agricultural Higher Education Project, ICAR, New Delhi was organized by ICAR-IARI, New Delhi and Mohinder Singh Randhawa Library, PAU, Ludhiana during 18 -19 March, 2019

Implemented KOHA Integrated Library Management System in SAUs.



UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD

BCT No. / 2019-20.

The University Librarian,
UAS, Dharwad
Date: 15-4-2019

To,
Dr. K. Veeranjaneyalu,
University Librarian & PI,
ICAR- NAHEP Project,
PJTSAU, Hyderabad.

Sir,

This is to inform that, Mr. E. Bharath Kumar, SRF, Library Science and Mr. D. Venkatesh Naik, SRF, Computer Science, working under ICAR-NAHEP Project have implemented Koha ILMS using Linex platform and completed data migration successfully at University Library and 3 constituent colleges of UAS, Dharwad from 12-14th April, 2019.

Yours faithfully,

(Dr. Geeta G. Shirnalli)

University Librarian.
University Librarian,
University of Agricultural Sciences,
Dharwad-580 005.

PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY
COLLEGE OF HOME SCIENCE, SAIFABAD, HYDERABAD - 500 004

From
The Associate Dean
College of Home Science
Saifabad
Hyderabad - 04

To
Dr. K. Veeranjaneyulu
University Librarian & Professor
Prof. Jayashankar Telangana State
Agricultural University
Rajendranagar, Hyderabad - 500 030 TS

Sir,

Lr. No. 29/Acad/CHSC/2018-19, Dt. 09.05.2019

Sub: PJTSAU – University Library – ICAR-NAHE Project – Installation and customization of KOHA ILMS in CHSc, College Library – Reg.

Ref: Lr. No. 17/UL/PJTSAU/KOHA ILMS/2019, Dt. 08.05.2019 of the Univ. Librarian, PJTSAU, Rajendranagar

* * *

With reference to the subject cited above, this is to inform that the following project staff members have attended to the work of installation and customization of KOHA Integrated Library Management Software at College of Home Science, Saifabad, Hyderabad on 09.05.2019.

1. Mr. D. Venkatesh Naik, SRF (Computer Science)
2. Mr. E. Bharath Kumar, SRF (Library and Science)

This is for favour of information.

Yours sincerely,

ASSOCIATE DEAN

ASSOCIATE DEAN
College of Home Science (PJTSAU)
Saifabad, Hyderabad - 4

International/ National Trainings/Workshop/Seminars

S.No	Programme Attended	Institute and Place	Period
1.	Launch Workshop of NAHEP sub project entitled "National Knowledge Management Centre for Agricultural Education and Research" under Innovation Grants	PJTSAU, Hyderabad	8th August, 2018
2.	Paper Presented on NCALUC -2018 from 04-05 September, 2018 at Bihar Veterinary University, Bihar.	Bihar Veterinary University, Bihar	04th -05th September, 2018
3.	Winter School on "Advances in Application of ICT in Libraries of NARES to Support Education and Research" (to delivered the lectures)	PJTSAU, Hyderabad	27th Sept., 2018
4.	Training cum Sensitization Workshop on "Krishikosh Repository –a Tool for Strengthening Agricultural Knowledge" (For organization of program)	Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh.	30th October, 2018
5.	Organized National Training Programme on "Implementation of KOHA and User Friendly Interface OPAC" from 14th to 15th December, 2018 at Sri Venkateswara Veterinary University, Tirupati for the benefit of Librarians of Southern States viz., Andra Pradesh, Karnataka, Kerala, Tamil Nadu and Telengana States.	Sri Venkateswara Veterinary University, Tirupati	14th to 15th December, 2018
6.	Training cum Sensitization Workshop on "Krishikosh Repository for Strengthening Agricultural Knowledge in NARES" (For conducting a program)	GovindBallabh Pant University of Agriculture and Technology, Udham Singh Nagar, Pantnagar, Uttarakhand	18th December, 2018
7.	Implementation of KOHA and creation of user friendly interface – OPAC on 28-29 January, 2019 at college of Vet. Sci, AAU, Khanapara, Guwahati.	College of Vet. Sci, AAU, Khanapara, Guwahati	28th -29th January, 2019
8.	Training program on 'Digital Repository i.e. e-Granth, Krishikosh of NARS' under National Training Programme for Librarians of SAUs (to deliver a lecture)	College of Veterinary Science, Assam Agricultural University, Khanapra, GS Road, Guwahati on	30th , January 2019
9.	Organized five day "National Level Capacity Building Workshop for Librarians of SAUs" from 5th to 9th February, 2019 under NAHEP on "National Knowledge Management	PJTSAU, Hyderabad	5th to 9th February, 2019

	Centre for Agricultural Education and Research" (NKMC4AER). Dr. Narendra Singh Rathore, Deputy Director General (Edn.), ICAR, New Delhi and Dr. V. Praveen Rao, Hon'ble Vice-Chancellor, PJTSAU has inaugurated the workshop and addressed the Library Professionals working in SAUs. 30 members were participated in the workshop.		
10.	"Krishikosh – A digital Repository in NARES for dissemination of Agricultural Knowledge" under "National Level Capacity Building Workshop for Librarians of SAUs" on 9 Feb., 2019. (To deliver a guest lecture) & Presented the progress of project (NAHEP-IC)	PJTSAU, Hyderabad.	10^{th} -11^{th} Feb., 2019
11.	The University Library, PJTSAU has organized one day "Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment" at College of Agriculture, Rajendranagar on 15^{th} February, 2019, under NAHEP on "National Knowledge Management Centre for Agricultural Education and Research" (NKMC4AER). About 70 members (Teachers and Scientists) were participated in the workshop.	PJTSAU, Hyderabad.	15^{th} February, 2019
12.	The University Library, PJTSAU has organized one day "Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment" at University of Agricultural Sciences, Dharwad on 18^{th} February, 2019, under NAHEP on "National Knowledge Management Centre for Agricultural Education and Research" (NKMC4AER). Chief guest Dr. B. Raju Former Director of Education, UHS, Bagalkot, Dr. M.B. Chetti Hon'ble Vice-Chancellor UHS, Former Registrar, UAS Bangalore and Guest Dr. K. Veeranjaneyulu, University Librarian, PJTSAU. About 42	University of Agricultural Sciences, Dharwad	18^{th} February, 2019

	members (Teachers and Scientists) were participated in the workshop.		
13.	The University Library, UAS, GKVK, Bangalore has organized one day "User Awareness Programme on " e-Resource in Agriculture" " at UAS, GKVK, Bangalore on 07th March, 2019.Chief guest Dr. B.N. Satyanarayana, Dean PGS ,Dr. K.P. Chinnaswamy , Coordinator, PPMC & Nodal officer, Agril. Edu. To ICAR, Dr. Banuprakash, K.G. Technical Officer. About 70 members (Teachers and Scientists) were participated in the workshop.	University Library, UAS, GKVK, Bangalore	07th March, 2019
14.	Two days Training program on "Strengthening of Digital Library in National Agricultural Research and Education System using KOHA Platform" (For conducting training program)	PAU, Ludhiana	18th -19th March, 2019

- ✓ The University Library, PJTSAU has launched ICAR-NAHEP Sub project on "National Knowledge Management Centre for Agricultural Education and Research" on 8th August, 2018. Dr. R. B. Sharma National Coordinator, NAHEP, ICAR, New Delhi, Dr. V. Praveen Rao, Hon'ble Vice-Chancellor and Dr. S. Sudheer Kumar Registrar & Nodal Officer (ICAR) PJTSAU has Launched Workshop. 25 members were participated in the workshop.

- ✓ Paper Presented on NCALUC -2018 from 04-05 September, 2018 at Bihar Veterinary University, Bihar.
- ✓ Training cum Sensitization Workshop on "Krishikosh Repository –a Tool for Strengthening Agricultural Knowledge" was organized by ICAR-IARI, New Delhi and Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh On 30th October, 2018. This training programe was inaugurated by Dr (Ms) AnjuSudhakarKhanna, Librarian, Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, 325 students and faculty attended this programe. Half day hands on training programe for uses as well as trouble-shoot for Krishikosh repository for the librarian and staff of library of this university was also conducted.

- ✓ Organized National Training Programme on "Implementation of KOHA and User Friendly Interface OPAC" from 14th to 15th December, 2018 at Sri Venkateswara Veterinary University, Tirupati for the benefit of Librarians of Southern States viz., Andra Pradesh, Karnataka, Kerala, Tamil Nadu and Telengana States.
- ✓ Training cum Sensitization Workshop on "Krishikosh Repository for Strengthening Agricultural Knowledge in NARES" Under sub- project entitled "National Knowledge Management Centre for Agriculture Education and Research" under Innovation Grant of National Agricultural Higher Education Project, ICAR, New Delhi organized by ICAR-IARI, New Delhi and GBPUAT, Pantnagar, during 18 December, 2018. This training programe was inaugurated by Dean College of Technology, Dr. J.P. Pandey and Dr. T. P. Singh, In-Charge, University Library. Krishikosh Repository for Strengthening Agricultural Knowledge in NARES was presented to thestudents and faculties of university. 138 students and faculty attended this programe.

- ✓ Implementation of KOHA and creation of user friendly interface – OPAC on 28-29 January, 2019 at college of Vet. Sci, AAU, Khanapara, Guwahati.
- ✓ Agricultural Knowledge management tools in the network digital environment 30 January, 2019 at college of Vet. Sci, AAU, Khanapara, Guwahati.
- ✓ Organized five day "National Level Capacity Building Workshop for Librarians of SAUs" from 5th to 9th February, 2019 under NAHEP on "National Knowledge Management Centre for Agricultural Education and Research" (NKMC4AER). Dr. Narendra Singh Rathore, Deputy Director General (Edn.), ICAR, New Delhi and Dr. V. Praveen Rao, Hon'ble Vice-Chancellor, PJTSAU has inaugurated the workshop and addressed the Library Professionals working in SAUs. 30 members were participated in the workshop.
- ✓ The University Library, PJTSAU has organized one day "Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment" at College of Agriculture, Rajendranagar on 15th February, 2019, under NAHEP on "National Knowledge Management Centre for Agricultural Education and Research" (NKMC4AER). About 70 members (Teachers and Scientists) were participated in the workshop.
- ✓ The University Library, PJTSAU has organized one day "Sensitization Workshop on Agricultural Knowledge Management Tools in Networked Digital Environment" at University of Agricultural Sciences, Dharwad on 18th February, 2019, under NAHEP on "National Knowledge Management Centre for Agricultural Education and Research" (NKMC4AER). Chief guest Dr. B. Raju Former Director of Education, UHS, Bagalkot, Dr. M.B. Chetti Hon'ble Vice-Chancellor UHS, Former Registrar, UAS Bangalore and Guest Dr. K. Veeranjaneyulu, University Librarian, PJTSAU. About 42 members (Teachers and Scientists) were participated in the workshop.
- ✓ The University Library, UAS, GKVK, Bangalore has organized one day "User Awareness Programme on " e-Resource in Agriculture" " at UAS, GKVK, Bangalore on 07th March, 2019.Chief guest Dr. B.N. Satyanarayana, Dean PGS ,Dr. K.P. Chinnaswamy , Coordinator, PPMC & Nodal officer, Agril. Edu. To ICAR, Dr. Banuprakash, K.G. Technical Officer. About 70 members (Teachers and Scientists) were participated in the workshop.
- ✓ Two days training program on "Strengthening of Digital Library in National Agricultural Research and Education System using KOHA Platform" Under sub- project entitled "National Knowledge Management Centre for Agriculture Education and Research" under Innovation Grant of National Agricultural Higher Education Project, ICAR, New Delhi was organized by ICAR-IARI, New Delhi and Mohinder Singh Randhawa Library, PAU, Ludhiana during **18 -19 March, 2019.** This training programe was inaugurated by Dr Baldev Singh Dhillon, Vice-Chancellor, PAU, and PadamShri awardee. He congratulated ICAR on achieving the milestone of developing the digital repository Krishikosh in NARES. He further said that Library automation using Koha has facilitated the provision of library services speedily to its users. The main objective of this project is strengthening of digital libraries under NARES. A total of 31 participants in the domain of library and information science from various State Agricultural Universities and Deemed Universities from the North Zone of India participated. The training was imparted on implementation and use of Koha Integrated Library System in the libraries of agricultural universities/ICAR institutes. Various speakers delivered their talk on digital library and customization of Koha Library Management Software, imparted extensive training to the participants which included hands-on session as well. Dr R. B. Sharma, National Coordinator, National Agricultural Higher Education Project, ICAR, New Delhi, was the chief guest for the valedictory session. He lauded the efforts of the organizers in holding the training programme which aimed at strengthening of library management system under NARES.

Publications

Papers Published (2018-2019)

1. Kandpal K.N., Rawat S.S. and Singh Baldev (2018). Library Networking and LIS Professional in Modern Era. Re-Engineering of Agriculture Libraries and Emerging Technologies:-Challenges and opportunities, National Conference of Agricultural Librarians of Users Community (NCALUC)-2018), organized by Bihar Animal Sciences University, Patna (Bihar) & AALDI. pp, 245-255.
2. Rawat S.S. & Kandpal K.N. (2018) Open Sources Software: its Usefulness for Libraries. Re-Engineering of Agriculture Libraries and Emerging Technologies:-Challenges and opportunities, National Conference of Agricultural Librarians of Users Community (NCALUC)-2018), organized by Bihar Animal Sciences University, Patna (Bihar) & AALDI. pp. 266-276.

Popular Article

1. K.N. Kandpal & S.S. Rawat (2018). Computer ke control panel ka upyog-Aayiye is bare me jane. Shalihotra darshan, Raj Bhasa Smarika – 2018, IVRI, pp. 58-60.
2. S.S. Rawat & K.N. Kandpal (2018). Android mobile phone user ke liye kuch upyogi yuktiya. Shalihotra darshan, Raj Bhasa Smarika – 2018, IVRI, pp. 56-57.

Book Published (2018-19)

1. K.N. Kandpal, S.S. Rawat, V.B. Chaturvedi, Sujata Jethi & Babu Lal Meena (2018). Hand Book of Unicode Enable Computer Application published by Raj Bhasa Anubhag, Indian Veterinary Research Institute, Izatnagar (U.P.).
2. K.N. Kandpal, S.S. Rawat, G. Rathinasabapathy, K. Veeranjaneyulu & Amrender Kumar (2019). Manual on KOHA, open source library system for National Training Programme for Librarians of SAUs, CUs and DUs on "Implementation of Koha and Creation of User Friendly Interface – OPAC" published by "National Knowledge Management Centre for Agriculture Education and Research" (NKMC4AER) under the project NAHEP (IG) of Indian Veterinary Research Institute (IVRI) Center, Izatnagar (U.P.).
3. K.N. Kandpal, S.S. Rawat, G. Rathinasabapathy, K. Veeranjaneyulu & Amrender Kumar (2019). Agricultural Knowledge Management Tools in the Natworked Digital Environment published by "National Knowledge Management Centre for Agriculture Education and Research" (NKMC4AER) under the project NAHEP (IG) of Indian Veterinary Research Institute (IVRI) Center, Izatnagar (U.P.).

- ✓ Manual on Koha Library System
- ✓ Live DVD on Koha LMS

Infrastructure facilities, assets and revenue generation:

Established NKMC4AER Centre at IVRI

Established a Center at National Library of Veterinary Sciences, ICAR-IVRI, and Izatnagar-243122 (UP) under the project entitled "National Knowledge Management Center for Agricultural Education and Research (NKMC4AER)" for efficient use of modern platform of Digital knowledge. The NKMC4AER continued to strengthen the digital platform for NARES repository various agricultural libraries of the universities.

Library Automation

The library has been using KOHA Library Management Software and is being used on LAN. The books, theses, bound volumes of journals and other publications are bar-coded. The bar-coded photo Identity cards are provided to the library members. The automated circulation of publications is done using laser bar-code reader.

Digitization

The Ph.D. theses available in the library have been digitized in PDF form and available for use on computers. Some of the rare and valuable publications available at Mukteshwar and Izatnagar libraries have also been digitized. Moreover this library is acting as a consortia partner under the NAIP project entitled "Strengthening of Digital Library and Information Management under NARS (e-Granth). And presently consortia partner of National Knowledge Management Center for Agricultural Education and Research (NKMC4AER) and continued to support to strengthen NARES.

CD-ROM Services

A CD-Mirror Hybrid Server is being used for CD-ROM services and the service is being provided on LAN. The various databases i.e. Agris CD, Beast CD, Biological Abstracts, Biotechnology Abstracts, FSTA, Medline Express and Vet CD databases are available on CD Mirror Server. Users are trained for using the CD-ROM services themselves. Revenue is generated for the institute by providing printouts of CD-ROM databases to the users. Besides, printouts of references/articles are provided by post to scientists and students on their requisition received from various parts of the country at nominal charge basis.

Resource Management

Thousands of users consult the library each year and thousands of publications are issued on loan to the members. Besides, a large number of students and scientists from various outside institutions and SAUs consult the library. The library provides inter-library loan services and inter-library exchange services. Translation services are provided through INSDOC, New Delhi.

Membership of CeRA

This library is a member of CeRA, a consortium for e-resources in agriculture, set up under NAIP, ICAR alongwith other institute and SAU libraries. Necessary services are being exchanged with the member libraries under the consortium including Document Delivery Service. The scientists and students of the institute are accessing thousands of online journals of publishers i.e. Elsevier, Springer, Taylor & Francis and Annual Review Inc. etc. being provided under CeRA.

Reprography Services

Photocopy facilities is also provided charging nominal charges in the Reading Hall itself. However, the library also provides this service to scientists and students on their requisition received from various parts of the country at nominal charge basis.

E-mail & Internet Facilities

Library has been providing E-mail & Internet facilities on 24 terminals to its users. This facilitates the users to access world wide information.

Auditorium Services

The air-conditioned auditorium of the library is being maintained and many functions/programmes of Institute as well as of other government and private organizations are organized from time to time in the auditorium.

Electronic Surveillance

Digital Video Recording based Close Circuit TV system with 24 cameras is being used in the various sections of the library for electronic surveillance.

Infrastructure Added

Assets added to National Library of Veterinary Sciences under the National Knowledge Management Center for Agricultural Education and Research (NKMC4AER) with financial support of National Agricultural Higher Education Project (NAHEP) under IG component i.e. Laptop, printer along with scanner, computer chairs and office chairs etc.

Laboratory Equipments:

- DELL Inspiron 15 7577 Laptops
- DELL Optillex 7060 Desktops
- HP LaserJet Pro M458dw Wireless Colour Printer
- Cisco SG500-52P 52-port Gigabit POE Stackable Managed Switch
- Network Attached Storage (NAS) 3.0 USB
- DELL Power Edge C6420 Server
- DELL Power Edge C6400 Enclosure
- Multifunction Photo Copier
- Split Air Conditioner

Furniture & Fixtures:

- Sofa
- Steel Almarah
- Chairs
- Computer Chairs
- Office Table
- Computer table
- Tea Pai